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National Study
On
Ten Year School Curriculum Implementation

S.K.Yadav



Department of Teacher Education and Extension
National Council of Educational Research and Training

Sri Aurobindo Marg, New Delhi - 110016

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5.8.2011
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Preface

Changes occur regularly in the social, political and economic order and it becomes a challenge before curriculum framers and developers to assimilate and absorb new changes to meet the aspirations of the people. It means curriculum development is not a one shot affair but a continuous and on-going process. The NCERT took up the responsibility of developing the school curriculum in 1975. The document entitled "The Curriculum for the Ten Year School – A Framework" recommended stage wise objectives of general education, subject wise instructional objectives and content, methodology of teaching, instructional aids and materials evaluation and feedback and implications for implementation. In 1977, Ishwar Bhai Committee reviewed the Ten Year School Curriculum. In 1988, National Curriculum for Elementary and Secondary Education – A Framework, was revised based on the National Policy on Education (NPE) 1986. In 2000, the National Curriculum Framework for School Education (NCFSE) was brought out on the basis of new emerging issues and concerns. The document includes context & concerns, organization of curriculum at elementary, secondary and higher secondary stages, evaluation and management of the system. It was again reviewed during 2005 to respond to new developments like curriculum load, tyranny of examination, commitment to universalisation of elementary education etc. NCERT developed NCF with the help of National Steering Committee, twenty-one Focus Groups, and the position papers prepared by these groups. The NCF-2005 was approved by Central Advisory Board of Education (CABE) in September, 2005. As mentioned above, curriculum development is a cyclic process, it requires regular feedback through different sources including research studies for its revision and updating from time to time. This study is an attempt in this direction. It focuses on the status of the implementation of ten-year school curriculum in different states of the country. The data was analyzed separately for primary, upper primary and secondary stages and presented in three chapters.

The Chapter-I **Introduction** consists of need, importance, and objective, sample of the study, tool used, and procedure for data collection and analysis of the data. The results and findings are discussed separately for primary, upper primary and secondary stages in Chapter II, III & IV in terms of structure of different school stages, agency for curriculum construction, nomenclature of different subjects, approaches of teaching different subjects, periods allotted for teaching of different subjects, time allotted for annual examination,

mechanism for evaluation of curriculum and suggestions for improving school curriculum. The last chapter V presents the important findings, conclusion and implication for action.

I am grateful to Prof. G. Ravindra, then In-Charge, Director, NCERT and present Director Prof. R. Govinda for providing guidance and suggestions at various stages of completing this study. I also gratefully acknowledge the extended time and valuable support provided by education Secretaries of different States/UTs, Chairman Board of School Education, Directors of SCERTs/SIEs and other educational functionaries in the States/UTs. Without their help and cooperation this study could not have been conducted and completed. Mr. Deepak Singh Chouhan, Computer Assistant, carried out the analysis of the data. I express my gratitude to him. I am thankful to the administrative staff for extending all secretarial assistance in the completion of the study.

It is hoped that the findings of the study will be used by policy planners, administrators and practitioners in constructing the school curriculum. Comments and suggestion are welcome for improving the quality of the report.

July, 2011

(S. K. Yadav)
Professor & Head

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Executive Summary

The Curriculum for the Ten Year School Curriculum 1975, National Curriculum Framework for Elementary and Secondary Education, 1988, National Curriculum Framework for School Education, 2000 and National Curriculum Framework 2005 are significant milestones in the field of school education and educational policies were formulated based on these frameworks. The Curriculum, syllabus and textbooks for schools are developed by NCERT in the light of recommendations of National Curriculum Frameworks as exemplar materials. In case of states and union territories, school curriculum and textbooks of NCERT are either adopted or adapted. The present study presents an updated status report of implementation of the school curriculum in different states at primary, upper primary and secondary stages up to 2011. Information was collected from the states and union territories through questionnaires and personal visits.

Findings

Significant findings of the study at different stages of ten year schooling are summarized below:

Primary stage

- The *primary stage* comprises of classes I to IV in seven states/ UTs whereas in 28 remaining States/UTs it comprises classes I to V.
- The *curriculum, syllabus and textbooks* prepared by NCERT are generally adopted with modifications by most of the States/UTs keeping in view state specific needs. State level bodies like SIEs, SCERTs, SIERTs Textbook Boards, Boards of School Education and Boards of Primary Education are involved in curriculum development and implementation.
- The total *school working days* in a year are minimum of 180 in Nagaland and Manipur and maximum of 253 in Bihar and Jharkhand. But in more than sixty per cent of the states/ UTs, the working days are between 201 and 220. In accordance with their socio-cultural and geographical conditions, Bihar and Jharkhand had the maximum number of working days in a year.
- The *duration of school hours* is 2.30 hours in Assam. In a majority of States/UTs, the school hours are between 5.30 to 6.30 hours.
- The number of periods *per week* for teaching different subjects is between 19 in Madhya Pradesh to 48 in A&N Islands, Uttarakhand, Goa, Tripura, Himachal Pradesh and Uttar Pradesh.
- The *duration of a class period* is minimum of 35 minutes in Arunachal Pradesh, Goa, Maharashtra, Nagaland and West Bengal and maximum 45 minutes in Andhra Pradesh, Bihar, Kerala, Delhi, Manipur, Pondicherry, Tripura, Jharkhand, Jammu & Kashmir, Punjab and Tamil Nadu.

- In a majority of States/UTs, there is only one *recess* period but there are two recess periods in Lakshadweep, Tamil Nadu and Sikkim. There are three recess periods in Andhra Pradesh, Gujarat, Kerala, Maharashtra, Dadra & Nagar Haveli, Mizoram, Chhattisgarh, Madhya Pradesh and Daman and Diu. The duration of recess is a minimum of 15 minutes in Pondicherry and a maximum of 80 minutes in Andhra Pradesh and Kerala.
- The *nomenclature of Science* is General Science in five States/ UTs and Environmental Studies in remaining 23 States/UTs. The integrated approach is followed in the teaching of Environmental Studies in 29 States/UTs. Maximum 9 periods per week are allotted for teaching of science in Rajasthan whereas only four periods are allotted in Andhra Pradesh, Pondicherry and Uttar Pradesh. Six periods are allotted in 16 of the States/UTs. The time allowed for annual examination of science in class V is 2.0 hours in 15 States/UTs and 3.0 hours in 16 States/UTs. Maximum marks for annual examination of this subject is 50 in Chhattisgarh, Uttar Pradesh, Himachal Pradesh, Lakshadweep, Goa, Haryana, Jammu & Kashmir, Kerala, Punjab, Uttarakhand, Andhra Pradesh and Arunachal Pradesh and 100 in other States/UTs.
- The *social science* is named as 'Environmental Studies' in 29 States/UTs and social studies in A & N Islands, Sikkim, Uttar Pradesh and Jammu & Kashmir. In 30 States/UTs, integrated approach is followed in the teaching of social sciences in class V. The periods per week for teaching of this subject are four in Andhra Pradesh, Pondicherry, Uttar Pradesh and Kerala and nine in Rajasthan and Jharkhand. Six periods are allotted in more than half the States/UTs. The time allowed for annual examination is 2.0 hours and maximum 3.0 hours in different states/union territories. Maximum marks for annual examination are 100 in 24 States/UTs and minimum 50 in ten states.
- *Periods allotted per week for teaching of Mother Tongue* in Class V is a minimum of three in Nagaland and a maximum of 13 in Maharashtra. The time allowed for annual examination of this subject is minimum 2.0 hours and maximum 3.0 hours in all States/UTs.
- English is introduced in Class I in 26 states and union territories.
- The *periods allotted per week for teaching of English* in Class V are maximum eight in A & N Islands, Assam, Sikkim, Arunachal Pradesh, Chandigarh and Himachal Pradesh and minimum three in Uttar Pradesh.
- The time **allowed for annual examination** is minimum 1.30 hours in Sikkim and maximum 3.00 hours in 15 States/UTs. The maximum marks for annual examination are 100 in 22 States/UTs.
- *Three language formula* is implemented only in 14 states at primary stage A majority of States/UTs have not implemented this formula in its true spirit.
- *Periods allotted per week for teaching of Mathematics* in Class V is maximum 12 in Andhra Pradesh and minimum 5 in Kerala, Meghalaya, Mizoram and Nagaland. The time allowed on for annual examination is 2.0 hours in about half the States/UTs and

maximum of 3.0 hours in fifteen States/UTs. Maximum marks for annual examination are 100 in 25 States/UTs and 50 in nine states.

- In most of the States/UTs, **health and physical education** is a compulsory subject, and it is optional in Tripura and J & K. It is an examination subject in about 50 per cent States/UTs. Both marks and grades are used for evaluation purposes. The time allowed for annual examination is 1.30 hours to 3.00 hours in all the States/UTs. Periods per week for teaching of this subject in Class V are minimum of one in Andhra Pradesh and maximum of seven in Delhi.
- In a majority of States/UTs, Art **Education** is a compulsory subject and is an examination subject in seventeen States/UTs. The time allowed for examination is from 1.0 to 3.0 hours in all the States/UTs. Both marks and grades are used for evaluation purposes. Only one period per week is allotted for teaching of Art Education in Assam, Meghalaya, Pondicherry, Andhra Pradesh and Himachal Pradesh and six periods are allotted in Madhya Pradesh and Uttarakhand.
- The nomenclature of **Work Education** is 'Socially Useful Productive Work (SUPW) and Work Experience' in equal number of 12 States/UTs, and Work Education in 4 States/UTs. In Tamil Nadu, it is known as Life Oriented Education (LOE). It is a compulsory subject in all the States/UTs and time allowed for annual examination is from one hour to two hours. Both marks and grades are awarded in the examination. The number of periods allotted per week for teaching of work education in Class V is only one in Meghalaya and Andhra Pradesh and maximum seven in Delhi and Orissa.
- **Periods allotted per week for the teaching of moral and value education** in class V are three in Andhra Pradesh and two in Karnataka, Uttar Pradesh, Chandigarh and Sikkim, four in Goa and six in Madhya Pradesh. The time duration for annual examination is one to two hours, and both marks and grades are used for examination and evaluation purposes.
- In evaluation, **marks are given for examination purposes** in 15 States/UTs and in 16 States/UTs. Marks are given for scholastic areas and grades are awarded for co-scholastic areas. Besides, continuous comprehensive evaluation has been implemented in 25 States/UTs.

Upper Primary Stage

- The **upper primary stage** includes classes VI to VIII in 27 States/UTs, VI & VII in Andhra Pradesh, V to VII in six States/UTs and V to VIII in West Bengal.
- The **major agencies involved in curriculum development** are SIEs (01) SCERTs (20) and Board of School Education (07). In the remaining seven states, **NCERT** Curriculum and syllabus is followed.
- In 18 States/UTs, **the number of working days** ranges from 201 to 220. The minimum of 180 days are noted in Manipur and the maximum of 253 days in Bihar and Jharkhand.

- The **duration of school hours** is from 5.00 hours to 7.00 hours in all the States/UTs. In 18 States/UTs, the duration is 6.00 hours.
- The **number of periods per week at upper primary stage** varies from 35 in Kerala, Pondicherry, Nagaland and Mizoram to a maximum of 54 in Himachal Pradesh & Haryana. In eleven states / UTs, the number is 48
- **Minimum 35 minutes is duration of a period** in Daman & Diu, Goa, Himachal Pradesh, Maharashtra, Uttarakhand, Haryana, Gujarat and Dadra & Nagar Haveli; and maximum 45 minutes in Andhra Pradesh, Assam, Kerala, Tamil Nadu, Manipur, Nagaland, Pondicherry, Jammu & Kashmir, Meghalaya and Madhya Pradesh. In seventeen States/UTs, the duration of a period is 40 minutes. In Rajasthan, the first six periods are of 40 minutes and the remaining two periods are of 30 minutes. In Uttarakhand, first 4 periods are of 40 minutes and last 4 periods are of 35 minutes duration.
- In a majority of States/UTs, there is only one **recess** period whereas there are three in Gujarat, Kerala, Andhra Pradesh, Dadra & Nagar Haveli, Madhya Pradesh, Chhattisgarh and Daman & Diu. In Lakshadweep, Maharashtra, Tamil Nadu, Sikkim and Mizoram, there are two recess periods. The maximum duration of recess period is 80 minutes in Andhra Pradesh and Kerala followed by 50 minutes in Mizoram, Sikkim, Gujarat, Dadra & Nagar Haveli, Daman & Diu and Chhattisgarh and 15 minutes in Pondicherry.
- **Science at the upper primary stage** is named as 'General Science' in 15 States/UTs. 'Science' in 14 and Physics, Chemistry and Biology in West Bengal. The integrated approach is followed in the teaching of science in 21 States/UTs and disciplinary approach in 13 States/UTs. The periods allotted per week to science in class VIII vary from five to eight. The time allowed for annual examination of this subject varies from 2.0 hours to 3.0 hours. The marks allotted are 50 in Jammu & Kashmir, Chhattisgarh, Goa and Lakshadweep 100 in other 28 States/UTs.
- The **nomenclature of Social Sciences** is 'Social Studies' in eight States/UTs and 'History, Geography & Civics' in Tripura and Haryana states. It is named as 'Social Sciences' in 22 States/UTs. The integrated approach is followed for teaching of this subject in 18 States/UTs and disciplinary approach in 16 States/UTs. **Periods per week** for teaching of social sciences in class VIII are two in Orissa and maximum eight in A & N Islands, Delhi and Arunachal Pradesh. The **time allotted** by different States/UTs is from 1.0 hours to 3.00 hours for **annual examination**. The **marks allotted** for annual examination vary from 50 to 200.
- The number of periods per week for **teaching of mother tongue** varies from 4 to 13. The time allowed for annual examination is between 2.0 hours to 4.0 hours and the marks allotted are from 50 in Jammu and Kashmir, Lakshadweep, Goa and Chhattisgarh to 100 in 28 States/UTs.
- The **periods per week for teaching of English** in class VIII are from minimum five in Bihar, Karnataka, Kerala, Nagaland, Jharkhand, Mizoram, Uttar Pradesh, Gujarat, Dadra & Nagar Haveli and Daman & Diu to maximum nine in Jammu and Kashmir. The time

allowed for annual examination is between 2.0 hours to 5.40 hours and the marks allotted are from 50 in Chhattisgarh, Kerala, Jammu & Kashmir and Uttar Pradesh to 100 in 29 States/UTs. The three-language formula is followed in all States/UTs except Nagaland and Tamil Nadu.

- The *periods allotted per week for teaching of Mathematics* in class VIII are minimum five in Kerala, Meghalaya and Nagaland and maximum 9 in Jammu and Kashmir. The time allowed for examination is 1.0 hour to 3.0 hours and the marks allotted for annual examination are 50 in five States/UTs and 100 in 28 States/UTs.
- *Health and Physical Education* is a compulsory subject in a majority of States/UTs. The periods allotted per week for teaching of *Health and Physical Education* in class VIII is minimum of one in Manipur & Orissa States/UTs and maximum of five in Meghalaya and Uttarakhand. The time allowed for annual examination is 1.0 hour in Arunachal Pradesh and 3.0 hours in Gujarat, Daman & Diu, Meghalaya and Dadra and Nagar Haveli.
- *Art Education* is a compulsory subject in 29 States/UTs and optional in remaining five States/UTs. The periods allotted for teaching of Art Education in class VIII is minimum one in Meghalaya, Tripura, Sikkim, West Bengal, Manipur, Tamil Nadu and Orissa and maximum six in Himachal Pradesh state.
- *Work Education* is named as Socially Useful Productive Work (SUPW) in 13 States/UTs and Work Experience in 14 state/UTs. Only in Tamil Nadu Work Education is known as life orientation education. It is an examination subject only in 17 States/UTs. For teaching of this subject there is only one period in a week in Meghalaya, Tripura, Gujarat, Dadra & Nagar Haveli, Jammu & Kashmir, West Bengal, Manipur, Tamil Nadu, Daman & Diu and Orissa and maximum four periods in a week in Bihar, Karnataka and Rajasthan.
- *Moral and Value Education* is taught at upper primary stage as a subject in Karnataka, Chandigarh, Maharashtra, Pondicherry, Sikkim, Andhra Pradesh, Haryana, Orissa, Meghalaya, Mizoram, Uttar Pradesh, Goa and Madhya Pradesh. Six periods per week are allotted in Maharashtra and Madhya Pradesh and three in Haryana
- In *evaluation*, marks are awarded in twenty States/UTs whereas in twelve states, marks are awarded for scholastic aspects and grades are awarded for co-scholastic aspects. The continuous comprehensive evaluation is implemented in 16 states only.

Secondary Stage

- *Secondary stage* consists of classes IX and X in 28 States/UTs whereas in remaining seven States/UTs, it consists of classes VIII to X.
- The curriculum and syllabus of NCERT is followed in nine States/UTs with necessary modifications according to their own situations. The Boards of School Education/ Board of Secondary Education are responsible for constructing curriculum and syllabus in sixteen states. The SIEs/SCERTs of eight states are also developing curriculum at this stage. In Pondicherry, the curriculum and syllabus are developed by Textbook Board.

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- The number of *working days in a year at secondary stage* is a minimum of 160 in Manipur and maximum of 259 in Assam. Fourteen States/UTs had working days between 210 and 220.
- The *duration of a school day* is minimum 5.0 hours in Madhya Pradesh, Chhattisgarh and Goa and maximum 6.30 hours in Arunachal Pradesh and Jharkhand. However, the number of working hours is six in the remaining twenty States/UTs.
- The *number of periods allotted per week* for teaching various subjects is minimum 34 in Chhattisgarh and maximum 54 in Arunachal Pradesh and Haryana. Forty-eight periods are allotted in 11 States/UTs.
- The *duration of a period* is minimum 35 minutes in Daman & Diu, Goa, Himachal Pradesh, Maharashtra, Haryana, Gujarat, Dadra & Nagar Haveli and Chhattisgarh and maximum 45 minutes in Kerala, Manipur, Nagaland, Pondicherry, Tamil Nadu, Mizoram, Jammu and Kashmir, Bihar, Karnataka and Meghalaya.
- In a majority of twenty-four States/UTs, there is only one *recess period* but there are two in five states and three in Andhra Pradesh, Gujarat, Kerala, Dadra & Nagar Haveli, Maharashtra and Daman & Diu. Minimum 15 minutes time is allotted in Pondicherry and Goa and maximum 80 minutes in Kerala.
- The nomenclature of *Science* is 'General Science' in nine States/UTs, 'Science' in twelve and 'Physics, Chemistry and Biology' in four States/UTs. The integrated approach for teaching of science is used in 17 States/UTs and disciplinary approach is used in an equal number of 17 States/UTs. Minimum five periods per week are allotted in Nagaland and Meghalaya and maximum nine periods in Chandigarh, Lakshadweep, Arunachal Pradesh, Uttarakhand and Delhi for teaching this subject. For annual examination of science subject, minimum 2.30 hours in seven states and maximum 6.00 hours in most of states are earmarked. Maximum 200 marks for annual examination are allotted in West Bengal and Tripura States/UTs, 120 marks in Kerala and 100 marks in maximum number of 28 States/UTs.
- The nomenclature of *Social Sciences* is 'Social Studies' in three States/UTs, 'Social Sciences' in twenty-four States/UTs and 'History, Geography, Civics and Economics' in seven States/UTs. The integrated approach is used for teaching of Social Sciences in 14 states and disciplinary approach in twenty states. The *periods allotted per week* for teaching of social science are minimum 5 in five states and maximum 9 in Chandigarh, Arunachal Pradesh, Uttarakhand and Delhi. The *time allowed for annual examination* is minimum 2.30 hours in Andhra Pradesh, Pondicherry, Tamil Nadu, Kerala and Orissa and maximum 6 hours in Tripura, West Bengal and Jharkhand. The maximum *marks allotted* for examination are 200 in West Bengal and Tripura followed by 100 in the remaining 29 States/UTs.
- For *teaching of Mother Tongue*, the minimum 4 periods per week are allotted in Lakshadweep and Mizoram and maximum nine in West Bengal and Uttar Pradesh. Six periods are allotted in 20 States/UTs. The time allowed for annual examination is 2.0

hours in Jharkhand and Lakshadweep and six hours in West Bengal. The marks allotted for examination are 50 in Lakshadweep, 100 in 29 States/UTs, 150 in Punjab and 200 in West Bengal and Pondicherry for two papers.

- For **teaching of English**, minimum five periods per week are allotted in six States/UTs and maximum 10 in Sikkim. The **time allowed for annual examination** is minimum 2.0 hours in Jharkhand and maximum 3.0 hours in twenty- seven States/UTs. The **marks allotted** for examination are 80 in Manipur, Delhi and Kerala; 100 in maximum number of States/UTs and 200 in Pondicherry only.
- **Three-language formula** is followed in all the States/UTs except Nagaland, Tamil Nadu, Meghalaya, West Bengal, Mizoram, Tripura and Assam.
- **Periods allotted per week for teaching of Mathematics** is minimum four in Orissa and maximum nine in Arunachal Pradesh and Uttarakhand. In eleven states, six periods per week for teaching of mathematics are allotted. The time allotted for examination is minimum 2.30 hours in 8 States/UTs and 3.0 hours in remaining 28 States/UTs. The marks allotted for examination are 80 in Delhi, Manipur and Kerala, 100 in 30 States/UTs, 150 in Maharashtra and 200 in West Bengal.
- **Health and Physical Education** is found to be a compulsory subject in most of States/UTs and annual examination is conducted in more than sixty per cent of States/UTs. Only one period is allotted per week for teaching of this subject in Kerala, Tripura and Assam and six are allotted in A&N Islands, Haryana and Madhya Pradesh.
- **Art Education** is a compulsory subject in sixteen States/UTs whereas it is optional in 15 States/UTs. The annual examination is conducted in more than fifty per cent States/UTs. Only one period is allotted for teaching of Art Education per week in five states and maximum six in Madhya Pradesh, Uttar Pradesh, Haryana and Himachal Pradesh states.
- **Work Education** is named as, 'Socially Useful Productive Work' in 9 States/UTs, Work Experience in 15 and 'Life Oriented Education' in Tamil Nadu. The annual examination is conducted in 13 States/UTs. The periods allotted for teaching per week are only one in Meghalaya, Tripura, Rajasthan, Assam, Tamil Nadu and Orissa and maximum five in Madhya Pradesh.
- **Moral and Value Education** is taught as a separate subject in many States/UTs. Only one period per week is allotted in Chhattisgarh, Chandigarh, Karnataka, Pondicherry and maximum six periods in Madhya Pradesh and Maharashtra for teaching this subject. Annual examination is conducted and maximum 100 marks are awarded in Haryana & Madhya Pradesh. .
- For **evaluation**, marks are used in twenty-one States/UTs and in the remaining ten States/UTs, marks are awarded for scholastic and grades are used for co-scholastic aspects. The continuous and comprehensive evaluation is followed in seventeen States/UTs only.
- The curriculum and textbooks developed by NCERT in the light of NCF-2005 are followed in the 15 States/UTs whereas 14 States/UTs have adapted the NCERT

curriculum, syllabus and textbooks. The remaining six States/UTs are in the process of revising their curriculum and textbooks. Details are given in the following table:

Status of Implementation of NCF-2005

Adopted NCERT Syllabus & Textbooks in 15 States	NCERT Syllabus & Textbooks adapted in 14 States	Process of development in 6 States
Andaman & Nicobar, Daman & Diu, Dadra & Nagar Haveli, Arunachal Pradesh, Chandigarh, Jammu & Kashmir, Delhi, Goa, Haryana, Mizoram, Uttarakhand, Himachal Pradesh, Lakshadweep, Rajasthan and Jharkhand	Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Pondicherry, Sikkim, Tamil Nadu, Uttar Pradesh	Karnataka, Manipur, Orissa, Punjab, Tripura and West Bengal.

In the end, it can be stated that there are lots of variations in implementation of NCF-2005 in terms of structure, working hours, recess periods, teaching of different subjects, evaluation pattern etc. at primary, upper primary and secondary stages in different States/UTs.

Implications

The following implications for further action are derived from the above findings of the study:

- States and UTs in which NCF-2005 is not being implemented at all or is being partially implemented need to be included in awareness building programmes. Such States/UTs are to be provided both academic and financial support on regular basis by the MHRD and NCERT. Regular monitoring and evaluation is needed by the MHRD and NCERT.
- Steps need to be taken to use a common structure of education for the first ten years of schooling as suggested in NCFs. It will help in implementing the Centrally Sponsored Scheme of Government of India and other educational policies. In this regard, meetings with State Policy Planners and Administrators should be organized.
- Integrated approach of teaching of social science and science should be promoted. The instructional materials for such approach should be prepared and training for teachers, teacher educators and resource persons should be organized by the states with leadership training by the NCERT.
- Efforts should be made for introduction of Continuous Comprehensive Evaluation (CCE) and grading system in evaluation by way of organizing meetings with policy planners, orienting teachers and teacher educators.
- In most of the States/UTs, English has been introduced in Class I. It should be ascertained based on research in which class this language should be introduced for optimal gains.
- Research studies need to be conducted to see the effectiveness of variations in terms of number of working days, periods in a week, duration of periods, number of recess periods on learning outcomes.
- A Research study needs to be undertaken to know the status of co-scholastic areas in actual practice.

Chapter 1

Introduction

Education influences and gets influenced by the developmental process. There is hardly any field of activity or sector of development which is not influenced by education in some form or another. Education provides broad guidelines to streamline educational processes and reflects the current needs and aspirations of society as its value system in the framework of broad human ideals. Mahatma Gandhi had visualized education as a means of awakening the national conscience to injustice, violence and inequality in the social order. The Secondary Education Commission (1952-53) and Education Commission (1964-66) also elaborated on the themes emerging out of Mahatma Gandhi's educational philosophy in the changed socio-political context with focus on national development. School education helps in achieving the educational aims by undertaking different core educating activities. It also provides means and opportunities to enhance creative expression, construct knowledge and develop capacity for aesthetic appreciation. In recent times, school education has emerged as an important segment of the total educational system expected to contribute significantly to the individual as well as the national development processes. In order to be effective, school education needs to be continuously reviewed and updated. In fact school curriculum is the root of this renewal process. Renewal takes place on the basis of feedback provided by researches conducted from time to time. The present study is an attempt in this direction and provides a status report of implementation of ten year school curriculum in different states and union territories in the country.

The term curriculum is generally identified with a course of studies or list of subjects prescribed for a course. In fact a list of subjects forms only a part of curriculum and does not constitute the whole of it. The Secondary Education Committee points out that a Curriculum does not mean only the academic subjects traditionally taught in the school but it includes totality of experiences that a pupil receives through manifold activities that go on in the school, in the classroom, library, laboratory, workshop, playground and in the numerous informal contacts between teacher and pupils. According to the position paper on Curriculum, Syllabus, and Textbooks (2006), "Curriculum is perhaps best thought of as that set of planned activities which are designed to implement a particular educational aim – set of such aims – in terms of the content of what is to be taught and the knowledge, skills and attitude which are to be deliberately fostered" (Winch) together with a statement of criteria for selection of content and choices in methods, materials and evaluation.

National Curriculum Framework

A Curriculum Framework indicates the directions in which the educational system of a country has to proceed in order to implement its educational policy. The NPE and POA (1986, 1992) documents proposed a national framework as a means of evolving a national system of education capable of responding to India's diversity of geographical and cultural milieus while ensuring a common core of values along with academic components. Both documents envisioned NCF as a means of modernizing the system of education.

The Curriculum for the Ten Year School – A Framework (1975)

The first attempt to develop the national curriculum for school education was initiated by the then Ministry of Education and Social Welfare in 1973 to develop the curriculum for the 10+2 pattern. For this purpose an Expert Group was appointed. The Group was expanded in 1974 and the NCERT organized the massive exercise of curriculum development. Finally, in 1975, a curriculum with curricular inputs and curricular sub-processes was prepared entitled, "The Curriculum for the Ten Year School -- A Framework. The framework provides an impetus to the teaching of environmental studies, science and mathematics as a part of general education curriculum from the primary level. The re-orientation of science teaching first initiated through the new curriculum and the development of the activity-based instructional material, gradually culminated in a national movement for popularizing science among school-children. The stage wise school curriculum of 1975 is given below.

Primary Stage (Classes I to V)

Classes	Areas of School Work	Time Allocation
I-II	* First Language	25%
	* Mathematics	10%
	* Environmental Studies (Social Studies and General Science)	15%
	* Work Experience and the Arts	25%
	* Health Education and Games	25%
	Total	100%
III-V	* First Language	25%
	* Mathematics	15%
	* Environmental Studies – I (Social Studies)	10%

	* Environmental Studies-II (General Science)	10%
	* Work Experience and the Arts	20%
	* Health Education and Games	20%
	Total	100%

Upper Primary Stage (Classes VI to X)

Upper primary and lower secondary schools should work for six days in the week. Assuming that there would be 48 periods per week, each of 30-40 minute duration, the instructional periods may be distributed as given below. However, schools may make suitable modifications, wherever necessary, since what is indicated here is notional.

VI-VIII	Areas of School Work	Periods
	* First Language	8
	* Second Language	5
	* Mathematics	7
	* Science (Life Science and Physical Science)	7
	* Social Science (History, Geography, Civics and Economics)	6
	* Arts	4
	* Work Experience	5
	* Physical Education, Health Education & Games	6
	Total	48

Secondary Stage (Classes IX to X)

IX-X	* First Language	6
	* Second Language	8
	* Third Language	2
	* Mathematics	7
	* Sciences (Life Sciences and Physical Sciences)	7
	* Social Sciences (History, Geography, Civics and Economics etc.)	7
	* Arts	3
	* Work Experience	5
	* Physical Education, Health Education and Games	6
	Total	48

It may be noted that the proportion of time for language is slightly less than the 25% shown earlier for the primary stage. The proportion remains the same in the secondary stages, although the number of languages increases to three. The medium of instruction is usually the first language.

Instructional Time in School

There should be a minimum of 240 working days in a year, out of which 220 days are for instruction and 20 days for school camps and community services etc. Instructional time in the lower primary classes may be 3 to 4 hours a day. In the upper primary or middle classes and the lower secondary classes, instructional time should not be less than five hours. In addition to the instructional time, each school day is to devote one hour more in the primary classes for the daily assembly, routine activities and one or two recesses. In the upper primary and lower secondary classes, 50 minutes may be devoted to the morning assembly and one recess.

National Curriculum for Elementary and Secondary Education – A Framework (1988)

The second major attempt to develop national curriculum was made to respond to major thrusts and recommendations highlighted in the NPE-1986. This exercise was carried out both for elementary and secondary education. It sought to evolve a national system of education by specifying minimum levels of

learning at each stage. In this framework, emphasis was also laid on continuous and comprehensive evaluation, utilization of media and technology, strengthening and restructuring of teacher education and improvement of science education in school. The stage wise school curriculum is given below

Pre-Primary Education (2 Years)

The basic mode of upbringing of children at this stage should be through group activities and play-way techniques, language games, number games and activities directed to promote environmental awareness etc. These should be used to make the learning experiences joyful to the children. No formal teaching of subjects is to be undertaken at this stage.

Elementary Education (8 Years)

Primary Stage (5 years) Classes I- V

	Areas	Time Allocation
i.	One Language - the mother tongue/the Regional Language	30%
ii.	Mathematics	15%
iii.	Environmental Studies I & II	15%
iv.	Work Experience	20%
v.	Art Education	10%
vi.	Health and Physical Education	10%
	Total	100%

Upper Primary Stage (Three Years)

	Areas	Time Allocation
I.	Three Languages	32%
II.	Mathematics	12%
III.	Science	12%
IV.	Social Science	12%
V.	Work Experience	12%
VI.	Art Education	10%
VII.	Health & Physical Education	10%
	Total	100%

Secondary Stage (Two years)

	Time Allocation
i.	Three languages
ii.	Mathematics
iii.	Science

IV	Social Services	13%
V	Work Experience	13%
VI	Art Education	9%
VII	Health & Physical Education	9%
	Total	100%

Medium of Instruction

It is widely recognized that mother tongue is the child's most natural medium of communication. The medium of instruction should, therefore, be the mother tongue. In the case of those whose mother tongue is different from the regional language, the mother tongue may be used as medium during the first two years of primary education and regional language should be used for other classes at elementary and secondary stages.

Instructional Time in School

The instructional time in a year should be 200 days keeping in view terminal examination, school functions etc. An early childhood education centre should function for three hours a day. A primary school should function for five hours a day out of which four hours should be available for instructional work. For the upper primary and secondary schools, the duration of a school day should be six hours, out of which five hours should be kept for instructional work and the rest utilized for morning assembly, recess etc. The duration of a class period should be around 40 minutes.

National Curriculum Framework for School Education (2000)

The NCERT initiated work on developing a new curriculum framework for the entire school education in September 1999. This was mainly undertaken for two considerations. One to make necessary changes in the curriculum suggested in the POA, 1992 and the ninth five year plan document. Second that curriculum should be reviewed periodically to make it more responsive to develop cognitive needs. The National Curriculum Framework for School Education: A Discussion Document was developed and discussed widely in different sections of society. This document was finalized and released in November 2000. This document includes contexts and concerns and the organization of curriculum at elementary, secondary and higher secondary stages, evaluation and managing the system. In this document, a common scheme of studies is advocated for Classes I to X. The core component areas and values shall form an integral part of the curriculum at all the stages and may suitably be integrated in different subject areas. Flexibility in the selection of the content and organizing learning experiences must be built in the system.

Early Childhood Education (ECE) – (2 Years)

This stage of education helps in preparing children for school and constitutes an important element of Early Childhood Care and Education (ECCE). It is available in various forms such as preparatory schools, nursery and kindergarten classes, etc. both in private and government sectors. Learning at this stage may be characterized by group activities, play-way techniques, language games, number games and the activities directed to promote socialization and environmental awareness among children.

Elementary Education (8 Years)

Primary Stage of education has been visualized in two segments with inherent internal continuity. The first segment comprises Classes I and II and the second segment consists of Classes III to V. The scheme of studies for these two segments is given below:

(a) Classes I and II

One Language – Mother Tongue/Regional Language

Mathematics

Art of Healthy and Productive Living.

(b) Classes III to V

One Language – the Mother Tongue/the Regional Language

Mathematics

Environmental Studies

Art of Healthy and Productive Living

Upper Primary Stage (3 Years)

Three Languages – the Mother Tongue/the regional language,

Modern Indian Language and English

Mathematics

Science and Technology

Social Science

Work Education

Art Education (Fine Arts, Visual & Performing)

Health & Physical Education (including games and sports, Yoga, NCC, Scouting and Guiding)

Secondary Stage (2 Years)

Three languages – the Mother Tongue/the regional language, Modern Indian Language and English

Mathematics

Science and Technology

Social Sciences

Work Education

Art Education (Fine Arts, Visual and Performing)

Health and Physical Education (including games and sports, Yoga, NCC, Scouting and Guiding)

Medium of Instruction

The medium of instruction ideally ought to be the Mother Tongue at all the stages of school education. In case of those students whose mother tongue is different from the state language, regional language may be adopted as a medium only from the third standard onwards

Instructional Time

The minimum of 180 days in a year should be available for effective instruction. An early childhood centre/pre-school centre should function for three hours a day. A primary school should function five hours a day out of which four hours may be set aside for instruction. For the upper primary and secondary school, the duration of a school day should be six hours out of which five hours should be kept for instruction and the rest for the other routine activities. The duration of a class period may be around 40 minutes. Time once allocated for one subject area/activity should not be encroached upon as per the individual institutional perception of the relative 'importance' of different subjects.

National Curriculum Framework (2005)

The NPE (1986) entrusted NCERT with the responsibility of reviewing and developing the framework at frequent intervals. The review and revision of the NCF is also necessary to respond to the new development and concerns like curriculum load, tyranny of examination, commitment to universal education and address the future requirements of school education by the turn of the century. In view of the above, NCERT developed NCF, 2005 with the help of National Steering Committee and twenty-one Focus Groups namely Aims of Education, Systemic Reforms for Curriculum Change, Teaching of Indian Languages, Teaching of English, Teaching of Mathematics, Teaching of Science, Teaching of Social Sciences, Habitat and Learning, Art, Music, Dance and Theatre, Heritage Crafts, Work and Education, Health and Physical Education, Early Childhood Education, Problems of SC & ST Children, Gender Issues in Education, Educational Technology, Education of Groups with Special Needs, Education for Peace, Curriculum, Syllabus and Textbooks, Teacher Education for Curriculum Renewal and Examination Reforms. The NCF was approved by Central Advisory Board of Education (CABE) on September, 2005.

The focus to develop NCF was to reduce curricular burden faced by children at all stages in our school system. The MHRD report entitled, 'Learning without Burden' in 1993 also took the view that the sense of burden felt by both children and teachers has to do with the systemic tendency reflected in both syllabus and textbook preparation as well as in teaching and examination-to treat information as knowledge.

Taking cues from 'Learning Without Burden' (1993) and seeking guidance from the Constitutional vision of India as a secular, egalitarian and pluralistic society, founded on the values of social justice and equality, certain broad aims of education have been identified in National Curriculum Framework. These include independence of thought and action, sensitivity to others' well being and feeling, learning, learning to respond to new situations in a flexible and creative manner, pre-disposition towards participation in democratic processes and social change.

The fact that learning has become a source of burden and stress on children is an evidence of a deep distortion in educational aims and quality. To correct this distortion, the present National Curriculum Framework - 2005 is based on the five guiding principles for curriculum development : (i) connecting knowledge to life outside the school; (ii) ensuring that learning shifts away from rote knowledge to life outside the school; (iii) enriching the curriculum to provide for overall development of children rather than remain textbook centric; (iv) making examinations more flexible and integrated into classroom life; (v) nurturing an over-riding identity informed by caring concerns within the democratic polity of the country.

The National Curriculum Framework, while placing the learner as the constructor of knowledge, emphasizes that curriculum, syllabus and textbooks should enable the teacher to organize classroom experiences in consonance with the child's nature and environment, and provide opportunities for all children. Significant changes are recommended with a view to making education more relevant to the present day and future needs in order to alleviate the stress children are coping with today. The NCF recommends the softening of subject boundaries so that children can get a taste of integrated knowledge and joy of understanding.

The document, taking note of the multilingual nature of the Indian Society, aims to use it as instrument for learning. The multilingual character of the Indian society is seen as a resource to promote multilingual proficiency in every child. Reading and writing, listening and speech contribute to the child's progress in all curricular areas and must form the basis for curriculum planning. Teaching of Mathematics should enhance the child's resources to think and reason, visualize and handle abstractions, to formulate and solves problems. Teaching of Science should be recast so that it enables children to examine and analyze experiences. Concern for the environment should be emphasized in every subject and through a wide range of activities involving students. It should be emphasized in every subject through wide range of activities involving outdoor project work. Social Science learning in the NCF proposes to recognize the disciplinary markers while emphasizing integration in Social Sciences from the perspective of marginalized groups. Gender justice and sensitivity towards tribal and *dalit* issues and minority sensitivities must inform all areas of Social Sciences. The NCF also draws attention to the four other curricular areas of Social Sciences. The NCF includes health and physical education and peace. Certain radical steps to link learning from the primary stage upwards with work are suggested on the ground

that work transforms knowledge into experience and generates important personal and social values such as self-reliance, creativity and co-operation. Art as a subject at all stages is recommended, covering all four major spheres, i.e. music, dance, visual arts and theatre with an emphasis on interactive approaches rather than instruction. The goal of art education is to promote aesthetic and personal awareness and the ability to express oneself in different forms. The importance of India's heritage crafts both in terms of their economic and aesthetic values should be recognized as being relevant to school education. The success of the child at school depends on the nutrition and a well-planned physical activity programme. The NCF recommends that resources and school time must be developed for strengthening of mid-day meal scheme and efforts to ensure that girls receive as much attention in health and physical education programmes from pre-school stage up to senior development and as a social temper. It is proposed that the potential of peace education for socializing children into a democratic and just culture should be created through appropriate activities and judicious choices of topics in all subjects at all stages.

Another major concern the framework seeks to address is the school ethos as a dimension of the curriculum. The primacy of the child within the aims of education and strategies of learning is necessary for success at school. As a source, school-time needs to be planned in a flexible manner for which locally planned, flexible school calendars options at senior secondary stages, discourages the entrenched tendency to place children in fixed streams, and limiting opportunities of children especially from the rural areas.

Advocating reforms in the system, the document calls for strengthening the Panchayati Raj institution through the adoption of a more streamlined approach to encourage community participation as a means of enhancing quality and accountability. Further, to ensure comparable quality in different regions of the country and also to ensure that when children of different backgrounds study together, it improves the overall quality of learning and enriches the school ethos. (NCF emphasizes on evolving a common school system)

In view of the changing role of teacher as per the shift in the perception of knowledge and learning the document advocates for reformulated teacher education programme that places thrust on the active involvement of learners in the process of knowledge construction, shared context of learning, teacher as a facilitator of knowledge theory and practice dimensions, and engagement with issues and concerns of contemporary Indian society from a critical perspective. The document identifies productive work as pedagogic medium in school curriculum from pre-primary to senior implemented in a mission mode. Examination reform constitutes the most important systemic reform measure to be taken for curriculum renewal and to find a remedy for the growing problem of psychological pressure that children and their parents feel, especially in classes X and XII. NCF-2005 suggests a shift from content-based testing to problem solving skills and onwards shorter examinations as well as examination with a

flexible time limit. The document also maintains that the prevailing typology of questions asked needs a radical change. The stress on pre-board examination must be reversed and strategies to enable children to opt for different levels of attainment should be encouraged to overcome the present system of generalized classification into 'pass' and 'fail' categories. The NCF in its last part recommends partnerships between the school system and other civil society groups, including non-governmental organization and teacher organizations for moving ahead. The innovative experiences already available should be mainstreamed and awareness of the challenges implied in the U.E. should become a subject of wide ranging cooperation between the state and all agencies concerned with education. (The status of implementation of NCF-2005 in different states and UTs is given in chapters 2, 3, 4 and appendix -I)

Rationale and Justification

Education was shifted to the concurrent list in 1976 through 42nd constitution amendment. The main implication of this amendment should be seen in terms of need to develop meaningful partnership between the center and the states for pursuing educational development. These developments emphasized the need for initiating efforts at the national level to pool collective thinking and to conceptualize curriculum and its sub processes. The National Curriculum Frameworks provide broad guidelines for the implementation of school education system in the country. The state Governments have to take steps for developing their own curriculum, syllabi and instructional material as a follow up of NCFs. The status of implementation of Ten Year School Curriculum in terms of process, structure, instructional time, approaches of teaching science and social sciences, nomenclature of different subjects' evaluation pattern etc. in different states and union territories is the subject matter of study.

Objectives of the Study

The specific objectives of the study include the following:

- To study the status of the 10-year school curriculum in terms of structure, agency, working days, school hours, class periods, periods per week, nomenclature of subjects, teaching approaches in different subjects etc. in different States/UTs in the country.
- To ascertain the weightage given to different subject areas in terms of time allocation and marks allotment in annual examination
- To derive implications for action to improve the quality of school education.

Methodology

To achieve the above mentioned objectives, a questionnaire was developed with the help of experts and tried out in four SCERTs namely, Delhi, Andhra Pradesh, Assam and Gujarat for finalization. The questionnaire had two parts. Part I was related to information about the weightage given to different areas of school curriculum and included items on subjects taught, number of class periods allotted to

different subjects per week, maximum marks allotted to different subjects in the examination, total number of class periods per week, duration of a class period, number of hours the school functioned on a working day. Information was sought separately for primary, upper primary and secondary classes. Part II of the questionnaire sought information about the agency at the state level which formulated the school curriculum, the mechanism followed, nomenclature of different subjects at primary, upper primary and secondary stages, approaches followed for teaching different subjects, status of examination of different subjects, mechanism for evaluation and suggestions for improving the curriculum and its transaction at the state level by its own efforts. The detailed questionnaire is given in the Appendix. The questionnaire was mailed to the concerned departments including State Institute of Education, State Council of Educational Research and Training, Board of School Education, Text Book Bureau and Directorate of School Education of all the states and union territories in the country for data collection. The data was collected through personal visits also. The data received was classified and analyzed and the draft report was prepared. This draft report was again sent to all the 35 States and Union Territories for validation and suggestions. Based on the comments and suggestions, the report was finalized. The study was confined up to secondary stage.

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Chapter 2

Status of School Curriculum: Primary Stage

In this and the following two chapters the findings in respect of various variables related to the status of implementation of the ten-year school curriculum in the states are being presented. The findings are classified separately for Primary, Upper Primary and Secondary stages. For all the stages, the information collected was analyzed, and the findings are presented under the following heads:

- Structure at Primary, Upper Primary and Secondary Stages
- Agency for constructing curriculum and syllabus
- Time duration of a school day
- Total number of periods in a week
- Time duration of a period
- Number and duration of recess periods
- Nomenclature of Science subjects
- Approaches of Science teaching
- Periods allotted for teaching of Science in a week
- Time duration allotted for annual examination in Science
- Maximum marks allotted for examination in Science
- Nomenclature of Social Sciences
- Approaches of teaching of Social Sciences
- Periods allotted for teaching of Social Sciences in a week
- Time allotted for examination of Social Sciences
- Maximum Marks allotted for examination of Social Science
- Periods allotted per week for teaching of Mother Tongue
- Time duration for Annual Examination of Mother Tongue
- Maximum Marks for examination of Mother Tongue
- Periods allotted per week for teaching of English Language
- Time allotted for annual examination of English Language
- Maximum marks allotted for annual examination for English Language
- Periods allotted per week for teaching of Mathematics
- Time allotted per week for teaching of Mathematics
- Time duration for annual examination of Mathematics

- Maximum marks allotted for annual examination in Mathematics
- Status of Health and Physical Education
- Periods allotted per week for teaching of Health and Physical Education
- Time allotted for Examination of Health and Physical Education
- Status of Art Education
- Periods allotted per week for teaching of Art Education
- Nomenclature of Work Education
- Value and Moral Education
- Mechanism for Evaluation of Curriculum
- Suggestions for improving the curriculum

PRIMARY STAGE

STRUCTURE

The structure at primary stage in different states is presented in Table 1.

Table 1: Structure at Primary Stage

S. No.	Structure	Name of the States /UTs	No. of the States /UTs (N=35)
1.	I to IV	Goa, Kerala, Lakshadweep, Meghalaya, Mizoram, Assam, Maharashtra	07
2.	I to V	A & N Islands, Andhra Pradesh, Bihar, Chandigarh, Chhattisgarh, Delhi, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Punjab, Pondicherry, Rajasthan, Tripura, Tamil Nadu, Uttar Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim, Haryana, Orissa, Manipur, Jharkhand, Nagaland, West Bengal, Gujarat, Dadra & Nagar Haveli, Daman & Diu	28

It may be observed that the structure of primary stage covers Classes I to IV in seven states/UTs whereas in the majority of the states/UTs, the primary stage includes Classes I to V. In this context it may be pointed out that the NPE - 1986, Curriculum for Ten Years Schooling (1975), National Curriculum for Elementary and Secondary Education-1988, National Curriculum Framework for School Education (NCFSE)-2000 and National Curriculum Framework (2005) had recommended primary stage of 5 years from Classes I to V. No doubt there might be some state specific reasons for having Classes I to IV at primary stage in seven states, but it would be better if these states also followed the recommended

national norms. By following national norms, the centrally sponsored schemes like Sarva Shiksha Abhiyan can be implemented in an effective manner.

AGENCY FOR CONSTRUCTION OF CURRICULUM AND TEXTBOOKS

Different agencies engaged by the respective states in the formulation of school curriculum, syllabus and textbooks at primary stage are reflected in Table 2.

Table 2: Agency for Curriculum Construction

S. No.	Agency	Name of the States/UTs	No. of the States/UTs (N=35)
1.	SCERT	Andhra Pradesh, Bihar, Gujarat, Karnataka, Kerala, Dadra & Nagar Haveli, Chhattisgarh, Orissa, Madhya Pradesh, Haryana, Maharashtra, Uttar Pradesh (SIE), Nagaland, Rajasthan(SIERT), Tamil Nadu, Meghalaya, Uttarakhand, Lakshadweep, Delhi, Goa, Daman & Diu	21
2.	SIE	Sikkim, Jammu and Kashmir	02
3.	NCERT	A&N Islands, Chandigarh, Arunachal Pradesh, Jharkhand, Himachal Pradesh	05
4.	Board of School Education/ Board of Primary/ Secondary Education	Mizoram, Punjab, West Bengal, Assam, Pondicherry, Manipur, Tripura	07

In more than fifty per cent states/UTs, the SIEs or SCERTs are involved in for preparing curriculum, syllabus and textbooks at primary stage. In seven states/UTs, Boards of School Education/Boards of Primary/Secondary Education are responsible for the formulation of primary stage curriculum and textbooks. The NCERT curriculum, syllabus and textbooks are followed in A & N Islands, Chandigarh, Arunachal Pradesh, Jharkhand and Himachal Pradesh. However, in Meghalaya SCERT & Board of School Education are responsible for the Primary stage curriculum and textbooks. It may be noted that most of these states/UTs adopt the NCERT curriculum and syllabus with certain modifications according to the situations.

NUMBER OF WORKING DAYS

The number of days in an academic year the primary school functions in respective states given in Table 3 shows that more than fifty per cent states have working days in the range of 201 to 220 in a year at primary stage, whereas in seven states, the range is from 221 to 240 days.

Table 3: Number of Working Days in a Year at Primary Stage

S. No	No. of working Days	Name of the States/UTs	No. of States/UTs (N=35)
1.	180-200	Manipur(180), Nagaland, (180), Pondicherry (200)	03
2.	201-220	A & N Islands (215-220), Andhra Pradesh (220), Delhi (210), Goa (220), Haryana (220), Jammu & Kashmir (220), Karnataka (220), Lakshadweep (220), Meghalaya (220), Tamil Nadu (220), Assam (220), Uttarakhand (220), Arunachal Pradesh (220), Mizoram (210), Tripura (220), Uttar Pradesh (220), West Bengal (210) , Chhattisgarh (220), Kerala (210), Orissa (220) , Madhya Pradesh (214)	21
3.	221-240	Himachal Pradesh (226), Rajasthan (240), Sikkim (230), Maharashtra (230) , Gujarat (232) , Dadra & Nagar Haveli(232), Daman and Diu (232)	07
4	241-260	Bihar (253), Jharkhand (253), Punjab (242), Chandigarh (245)	04

Jharkhand and Bihar have reported the maximum number of working days as 253 respectively. On the other hand, Nagaland and Manipur have reported the number of working days as 180 only. The 1975, NCERT Curriculum had recommended a minimum of 240 working days, with 220 days for instruction and 20 days for school camps and community services. The 1988 and 2005 NCERT Curriculum had recommended 200 working days. The 2000 NCERT NCFSE document, however, had recommended a minimum of 180 school days for effective instruction. It means there were lots of variations in the working days in different states. It may be due to their socio-economic and geographical conditions.

TOTAL DURATION OF SCHOOL HOURS

Variations in duration of a working day in school across the states are presented in Table 4.

Table 4: Total Duration of School Hours in a Day

S. No.	Total Duration	Name of the States /UTs	No. of the States/UTs (N=35)
1.	5.30- 6.30 hrs	A&N Islands, Andhra Pradesh, Bihar, Goa, Gujarat, Haryana, Jammu and Kashmir, Kerala, Pondicherry, Jharkhand, Karnataka, Dadra & Nagar Haveli, Himachal Pradesh, Madhya Pradesh, Daman and Diu, Punjab, Uttar Pradesh, Orissa	18
2.	4.30-5.30 hrs	Chhattisgarh, Delhi, Lakshadweep, Mizoram, Rajasthan, Tamil Nadu, Sikkim, Kerala, Uttarakhand, Manipur, Arunachal Pradesh, Chandigarh	12
3.	3.30-4.30 hrs	Meghalaya, West Bengal, Nagaland, Tripura	04
4.	2.30-3.30 hrs	Assam	01

The school duration was reported between 5.30 to 6.30 hours in a day in 18 states and 4.30 to 5.30 hours in a day in 13 states. In Assam, the school hours are 2.30 for Classes I and I and 5.00 hours for Classes III to V. In Uttarakhand, the duration for class's I-II is 4 hours and 5:30 hours for classes III-V. The 1975 NCERT Curriculum had recommended 3 to 4 hours a day plus one hour for daily prayer, one or two recess periods and other routine activities. The 1988 and 2000 NCERT Curriculum had recommended five hours, with four hours for effective instruction and one hour for morning assembly and recess. No doubt, the variations in school hours may be due to their geographical situations but it would be better to follow the national norms for effective teaching learning process.

TOTAL NUMBER OF PERIODS IN A WEEK

The total numbers of periods allotted per week for teaching activities in different states/UTs are shown in Table 5.

Table 5: Total Number of Periods in a Week

S. No.	Total No. of Periods per Week	Name of the States/UTs	No. of the States/UTs (N=35)
1.	48	A&N Islands, Uttarakhand, Goa, Tripura, Himachal Pradesh, Uttar Pradesh	06
2.	45	Maharashtra, Karnataka, Bihar, Daman and Diu, Jharkhand, Gujarat, Dadra & Nagar Haveli	07
3.	42	Andhra Pradesh, Delhi, Lakshadweep, Orissa, Rajasthan, West Bengal, Chhattisgarh, Punjab, Chandigarh	09
4.	40	Sikkim, Assam	02
5.	36	Arunachal Pradesh, Jammu & Kashmir, Manipur	03
6.	35	Kerala, Pondicherry, Tamil Nadu	03
7.	30	Nagaland, Meghalaya, Mizoram	03
8.	19	Madhya Pradesh	01

As many as 48 class periods in a week are provided by the states including Andaman & Nicobar Islands, Uttarakhand, Tripura, Himachal Pradesh, Uttar Pradesh and Goa, followed by 45 periods in Maharashtra, Karnataka, Jharkhand, Gujarat, Dadra & Nagar Haveli, Daman and Diu and Bihar. Mizoram, Nagaland and Meghalaya have 30 class periods and Madhya Pradesh 19 class periods. In Haryana, there is no period system at primary stage. In Manipur, classes I and II have 24 periods in a week and Classes III to V have 36 periods in a week. In Rajasthan 42 class periods per week are earmarked for Classes I and II and 48 Class periods for Classes III to V. In Uttarakhand, 36 periods are allotted to classes' I-II in a week whereas 48 have been allotted to classes III-V in a week. In Jammu & Kashmir, 30 periods are allotted for class I-II and 36 periods allotted for Class III-V. In West Bengal 31 class periods are allotted per week for Classes I and II and 42 for Classes III, IV and V. In Arunachal Pradesh 36 class periods are allotted. In Uttar Pradesh, 36 periods are allotted for classes I and II and 48 periods are allotted for classes III to V. In Tripura, Class I-II has 3 periods a week and class III-V has 5 periods a week. The 1975 NCERT Curriculum recommended distribution of total school time in terms of percentages for different subject areas whereas the 1988 and 2000 Curriculum recommended time-wise allocation to different subject areas.

DURATION OF A CLASS PERIOD

The allocation of time for a class period for teaching purpose by different states is presented in Table 6.

Table 6: Duration of a Class Period

S. No.	Duration of Periods	Name of the States/UTs	No. of the States/UTs (N=34)
1.	45 Minutes	Andhra Pradesh, Bihar, Kerala, Delhi, Manipur, Pondicherry, Tripura, Jharkhand, Jammu & Kashmir, Punjab, Tamil Nadu	11
2.	40 Minutes	A&N Islands, Assam, Orissa, Karnataka, Lakshadweep, Meghalaya, Sikkim, Mizoram, Uttarakhand, Uttar Pradesh, Himachal Pradesh, Chhattisgarh, Madhya Pradesh, Chandigarh, Daman and Diu, Gujarat, Dadra & Nagar Haveli	17
3.	35 Minutes	Arunachal Pradesh, Goa, Maharashtra, Nagaland, West Bengal	05
4.	30 Minutes	Rajasthan	01

The duration of a class period is 45 minutes in 11 states, which account for 32.35% of the total states and union territories included in this study. In Rajasthan, 30 minutes is allotted for a class period. The class period is reported to be of 40 minutes duration in 17 states and 35 minutes in five states. The NCERT Curriculum Frameworks 1975, 1988, 2000 and 2005 also recommended around 40 minutes for a class period. It means the states are mostly following the recommendations made in NCFs of NCERT.

NUMBER OF RECESS PERIODS

The situation in respect of recess periods in different states is reflected in Table 7.

Table 7: Number of Recess Periods

S. No.	No. of Recess Periods	Name of the States/UTs	No. of the States/UTs (N=35)
1.	1	A & N Islands, Arunachal Pradesh, Assam, Bihar, Chandigarh, Delhi, Goa, Haryana, Himachal Pradesh, Punjab, Jammu & Kashmir, Karnataka, Jharkhand, Manipur, Meghalaya, Nagaland, Pondicherry, Rajasthan, Tripura, Uttar Pradesh, Uttarakhand, West Bengal, Orissa	23
2.	2	Lakshadweep, Tamil Nadu, Sikkim	03
3.	3	Andhra Pradesh, Gujarat, Kerala, Maharashtra, Dadra & Nagar Haveli, Mizoram, Chhattisgarh, Daman and Diu, Madhya Pradesh	09

In most of the states, one recess period is provided, but, States/UTs like Lakshadweep, Sikkim and Tamil Nadu provide two recess periods and other states like Andhra Pradesh, Dadra and Nagar Haveli, Gujarat, Kerala, Mizoram, Chhattisgarh, Madhya Pradesh, Daman and Diu and Maharashtra provide three recess periods. Madhya Pradesh has one long recess period of thirty minutes and two short recess periods of five minutes each. It means that recess breaks and duration of school hours are closely related. The states with more recess breaks have more number of school hours. It is evident from both the Tables No. 4 and 7.

DURATION OF RECESS PERIOD

The time allotted for a recess break in different states is given in Table 8.

Table 8: Duration of Recess Periods

S. No.	Duration of Recess Periods	Name of the States/UTs	No. of the States/UTs (N=35)
1.	80 Minutes	Kerala, Andhra Pradesh	02
2.	70 Minutes	Maharashtra	01
3.	50 Minutes	Sikkim, Mizoram, Chhattisgarh, Gujarat, Dadra & Nagar Haveli, Daman and Diu	06
4.	45 Minutes	Manipur, Jammu & Kashmir	02
5.	40 Minutes	Karnataka, A&N Islands, Arunachal Pradesh, Orissa, Himachal Pradesh, Madhya Pradesh	06
6.	30 Minutes	Assam, Bihar, Meghalaya, Uttar Pradesh, Nagaland, Rajasthan, Tripura, Uttarakhand, West Bengal, Jharkhand, Punjab	11
7.	20 Minutes	Delhi, Chandigarh, Goa, Lakshadweep, Tamil Nadu, Haryana	06
8.	15 Minutes	Pondicherry	01

As may be seen from the figures in Table 8, there are wide variations between the states regarding the time allotted to recess period(s). One third of the states have 30 minutes recess period whereas in Pondicherry, the duration is only 15 minutes. There are as many as three recess periods in a day in states like Andhra Pradesh (10M +75M+10M), Maharashtra (10M+50M+10M), Gujarat (10M+30M+10M) and Kerala (10M+60M+10M). Two recesses are provided in a day in Daman and Diu (10M+10M), Lakshadweep (10M+10M), Orissa (10M+30M), Tamil Nadu (10M+10M) and Sikkim (15M+35M). The bifurcation of duration of recess period is given in brackets of concerned states.

TEACHING OF SCIENCE

The existing nomenclature of science subject in different states/ UTs is given in Table 9.

Table 9: Nomenclature of Science Subject

S. No.	Nomenclature of Science Subject	Name of the States/UTs	No. of the States/UTs (N=35)
1.	General Science	A&N Islands, Arunachal Pradesh, Tripura, Sikkim, Jammu & Kashmir	05
2.	Environmental Studies (Science)	Andhra Pradesh, Assam, Bihar (Social Studies), Goa, Delhi, Haryana, Himachal Pradesh, Karnataka, Manipur, Madhya Pradesh, Kerala, Orissa, Nagaland, Maharashtra, Pondicherry, Lakshadweep, Meghalaya, West Bengal, Jharkhand, Rajasthan, Mizoram, Punjab, Chandigarh	23
3.	Science	Uttarakhand, Tamil Nadu	02
4.	Environment	Gujarat, Dadra & Nagar Haveli, Daman and Diu	03
5.	Integrated Science	Uttar Pradesh, Chhattisgarh	02

In about seventy per cent of the states/UTs, the science subject is named as Environmental Studies and it is named as General Science in five states/UTs. In West Bengal, the nomenclature of science subject for Classes I and II is known as 'Parivesh Porichiti. In Haryana science is named as EVS-II i.e. Parivesh Adhyan-II. In Uttar Pradesh, science subject is known as Integrated Science from Class I to IV. In Meghalaya, from Classes I-IV nomenclature of science subject is under Art of Healthy and Productive Living (AHPL) and classes III-IV is under Environmental Studies. The NCFSE (2005) recommended the nomenclature as Environmental Study at the Primary stage. This recommendation has been followed in a majority of the states.

APPROACHES FOR TEACHING OF SCIENCE

Integrated approaches were followed by all the states/UTs for teaching of science at primary stage as shown in Table 10.

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TABLE 10: Approach for Teaching of Science at Primary Stage

<i>Approach</i>	<i>Name of the States/UTs</i>	<i>No. of the States/UTs (N=33)</i>
Integrated Approach	Andhra Pradesh, Assam, Bihar, Goa, Chandigarh, Tripura, Delhi, Gujarat, Himachal Pradesh, Jammu & Kashmir, Punjab, Karnataka, Maharashtra, Arunachal Pradesh, Mizoram, Meghalaya, Nagaland, Pondicherry, Uttar Pradesh, Uttarakhand, West Bengal, Sikkim, Manipur, Kerala, Lakshadweep, Jharkhand, Dadra & Nagar Haveli, Daman & Diu, Orissa	29
Disciplinary Approach	Haryana, Tamil Nadu	02
Both	Chhattisgarh, Madhya Pradesh	02

In Chhattisgarh and Madhya Pradesh, Integrated approach and disciplinary approach is used for teaching of science at primary stage. In Madhya Pradesh, for classes I and II the approach is integrated with language and for class III to V it is a separate subject but taught as interdisciplinary approach. The majority of states are following the recommendations made in NCERT Curriculum Framework 1975, 2000 and 2005 by following integrated approach for teaching of science and not for teaching discipline wise.

PERIODS ALLOTTED PER WEEK FOR TEACHING OF SCIENCE

Information received from the states in respect of number of periods in a week for teaching of science subject in Class V is classified in Table 11.

Table 11: Allocation of Periods per Week for Teaching Science in Class V

<i>S. No.</i>	<i>Periods per week</i>	<i>Name of the States/UTs</i>	<i>No. of the States/UTs (N=34)</i>
1.	4	Andhra Pradesh, Pondicherry, Uttar Pradesh	03
2.	5	Nagaland, Punjab, Sikkim, West Bengal, Kerala, Tamil Nadu	06
3.	6	Bihar, Assam, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, Lakshadweep, Orissa, Madhya Pradesh, Uttarakhand, Karnataka, Jharkhand, Goa, Meghalaya, Tripura, Manipur, Chandigarh	16
4.	7	Maharashtra, Delhi, Mizoram, Gujarat, Dadra & Nagar Haveli, Daman and Diu	06
5.	8	A & N Islands, Arunachal Pradesh	02
6.	9	Rajasthan	01

In a little over one-half of the states, 6 class periods are earmarked for science. There is no fixed period for teaching of science in Haryana at primary stage. In Rajasthan, 9 periods are allotted both for EVS-I and EVS-II. In Uttarakhand EVS is taught as a combination of Science and Social Studies in Class III to V. The NCERT Curriculum Framework 1975 recommended 25 per cent time per week, whereas 15 per cent was allocated in 1988 curriculum for the teaching of science.

DURATION OF ANNUAL EXAMINATION

Information was sought from the states about the total time spent for assessing learning achievement in the science subject in Class V in the annual examination. Table 12 presents the classified information in this regard.

Table 12: Time Allotted in Annual Examination of Class V for Science

S. No.	Total Time for Examination (in hours)	Name of the States/UTs	No. of the States/UTs (N=35)
1.	2.0 Hours	Andhra Pradesh, Bihar, Orissa, Uttar Pradesh, Chhattisgarh, Lakshadweep, Pondicherry, Tamil Nadu, Punjab, Uttarakhand, Jharkhand, Rajasthan, Goa, Haryana, Kerala	15
2.	2.30 Hours	Jammu & Kashmir, Madhya Pradesh, West Bengal, Karnataka	04
3.	3.0 Hours	A&N Islands, Assam, Chandigarh, Delhi, Daman & Diu, Sikkim, Gujarat, Meghalaya, Manipur, Maharashtra, Mizoram, Nagaland, Dadra & Nagar Haveli, Tripura, Arunachal Pradesh, Himachal Pradesh	16

In sixteen states, time allotted for examination of science is 3.0 hours, in four states, it is 2.30 hours and in the remaining 15 states, it is limited to 2 hours only. As per NCERT/NCF-2005 Science is taught along with Social Science together known as EVS. Examination for EVS is conducted in Class V for 3 hours duration. The variations in time allotment for examination in different states may depend upon the priority given to the subject.

MAXIMUM MARKS ALLOTTED FOR ANNUAL EXAMINATION

Maximum marks allotted by different states/UTs in the annual examination for science are shown in Table 13.

Table 13: Maximum Marks in Annual Examination for Science Subject in Class V

S. No.	Maximum Marks for the Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	50	Chhattisgarh, Uttar Pradesh, Himachal Pradesh, Lakshadweep, Goa, Haryana, Jammu & Kashmir, Kerala, Punjab, Uttarakhand, Arunachal Pradesh, Andhra Pradesh	12
2.	80	Manipur	01
3.	100	A&N Islands, Bihar, Assam, Chandigarh, Delhi, Daman & Diu, Gujarat, Haryana, Meghalaya, Orissa, Madhya Pradesh, Maharashtra, Mizoram, Tamil Nadu, Nagaland, Pondicherry, Rajasthan, Tripura, Sikkim, West Bengal, Dadra & Nagar Haveli, Jharkhand	22

In 22 States/UTs, 100 marks are allotted in the annual examination. But 50 marks are allotted in Chhattisgarh, Uttar Pradesh, Andhra Pradesh, Himachal Pradesh, Lakshadweep, Goa, Haryana, Jammu & Kashmir, Kerala, Punjab, Arunachal Pradesh and Uttarakhand states.

In Uttarakhand EVS is being taught as a combination of Science and Social Science for classes III-V. In Rajasthan 100 marks are allotted both for EVS-I and II. The marks allotted for annual examination for science depend on the priority given by the state. In Uttarakhand grand total for each subject are 150 (within CCE) i.e. 50 marks half yearly, 50 marks CCE and 50 marks for annual exam. In Arunachal Pradesh in class V examination of EVS covering both Science and Social Studies for 50 marks each is conducted for total time duration of 3 hours.

TEACHING OF SOCIAL SCIENCES

The nomenclature followed in different states/UTs for teaching of social sciences at primary stage is given in Table 14.

Table 14: Nomenclature of Social Sciences

S. No.	Nomenclature of Social Sciences	Name of the States/UTs	No. of the States/UTs (N =35)
1.	Social studies	A & N Islands, Sikkim, Uttar Pradesh, Jammu & Kashmir	04
2.	Environmental Studies	Arunachal Pradesh, Delhi, Assam, Andhra Pradesh, Jharkhand, Dadra & Nagar Haveli, Gujarat (Integrated with Environment), Kerala, Himachal Pradesh, Haryana, Karnataka, Goa, Lakshadweep, Bihar, Daman and Diu, Madhya Pradesh, Pondicherry, Nagaland, Punjab, West Bengal, Orissa, Manipur, Maharashtra, Meghalaya, Rajasthan, Mizoram, Uttarakhand, Chandigarh, Tripura	29
3.	Social Science	Chhattisgarh, Tamil Nadu	02

The social science is named as Environmental Studies in 29 states and Social Studies in 4 states. In Tripura, the nomenclature is Environment and Social Study i.e. Paribesh O Samaj Parichiti. In West Bengal, the nomenclature of social sciences is 'Parivesh Porichiti' for Classes I and II and History and Geography for Classes III, IV and V. In Chhattisgarh, Social Science is called Integrated Science. In Meghalaya, for classes I-IV nomenclature of social sciences is Art of Healthy and Productive Living (AHPL) and for classes III and IV it is Environmental Studies. In Haryana, social science is taught as Parivesh Adhyan-I. In Tamil Nadu, Social Science is taught as Environmental Sciences in class I and II and Social Sciences in class III to V. In Uttar Pradesh Social Sciences is taught as Hamara Parivesh. In Gujarat, Environmental Studies is integrated with Environment as a nomenclature for Social Sciences. The NCFSE 2000 and 2005 recommended Environmental Studies as the nomenclature for the social science subject. It has been implemented in most of the states.

APPROACHES FOR TEACHING OF SOCIAL SCIENCES

The approach followed by different states/UTs for teaching of social sciences is given in Table 15.

Table 15: Approaches for Teaching of Social Sciences

<i>Approach</i>	<i>Name of the States/UTs</i>	<i>No. of the States /UTs(N=35)</i>
Integrated Approach	Andhra Pradesh, Assam, Bihar, Chandigarh, Goa, Jharkhand, Chhattisgarh, Gujarat, Jammu and Kashmir, Dadra & Nagar Haveli, Karnataka, Uttar Pradesh, Kerala, Lakshadweep, Nagaland, Delhi, Pondicherry, Punjab, Mizoram, Tripura, Arunachal Pradesh, Sikkim, Himachal Pradesh, West Bengal, Maharashtra, Uttarakhand, Daman and Diu, Orissa, A & N Islands, Meghalaya	30
Disciplinary approach	Rajasthan, Haryana, Tamil Nadu	03
Both the approaches	Manipur, Madhya Pradesh	02

In 30 states/UTs the integrated approach was followed for teaching of social sciences as recommended by the NCERT Curriculum Framework 1975, 1988, 2000 and 2005. Both the approaches are used for teaching of Social Sciences in Manipur and Madhya Pradesh. In class I and II in Madhya Pradesh the approach is integrated with language and for class III to V it is a separate subject but taught as interdisciplinary approach. In Rajasthan, Tamil Nadu and Haryana disciplinary approach is followed for teaching of social science at primary stage.

PERIODS PER WEEK

The number of class periods allotted by different states/UTs for teaching the subject of social sciences in Class V in the weekly timetable is shown in Table 16.

Table 16: Social Science: Periods per Week

<i>S. No.</i>	<i>Periods per Week</i>	<i>Name of the States/UTs</i>	<i>No. of the states/UTs (N=34)</i>
1.	4	Andhra Pradesh, Pondicherry, Uttar Pradesh, Kerala	04
2.	5	Nagaland, Sikkim, Meghalaya, Tamil Nadu	04
3.	6	Bihar, Chhattisgarh, Jammu and Kashmir, Karnataka, Lakshadweep, Assam, Madhya Pradesh, Orissa, West Bengal, Tripura, Uttarakhand, Punjab, Manipur, Gujarat, Dadra & Nagar Haveli, Daman & Diu, Goa, Chandigarh, Himachal Pradesh	19
4.	7	Maharashtra, Arunachal Pradesh, Delhi, Mizoram	04
5.	8	A&N Islands	01
6.	9	Rajasthan, Jharkhand	02

Forty per cent of the states have 6 class periods in a week. In Rajasthan and Jharkhand 9 periods are allotted both for EVS I & II. The NCERT Curriculum Framework 1975 and 1988 recommended 20 per cent and 15 per cent respectively of total school time in a week for teaching this subject. Many states have implemented and allotted time periods as per national norms.

DURATION OF ANNUAL EXAMINATION

The time allotted for assessing learning achievement in social sciences subject in Class V at the time of annual examination by the different states is shown in Table 17.

**Table 17: Social Science: Time Allotted in Annual Examination
For Class V**

S. No	Time for Examination	Name of the States/UTs	No. of the states/UTs (N=35)
1.	2.0 Hours	Andhra Pradesh, Jharkhand, Chhattisgarh, Lakshadweep, Tamil Nadu, Pondicherry, Punjab, Uttar Pradesh, Uttarakhand, Bihar, Orissa, Rajasthan, Haryana, Kerala, Goa	15
2.	2.30 Hours	Himachal Pradesh, Jammu and Kashmir, Madhya Pradesh, West Bengal	04
3.	3.0 Hours	A & N Islands, Assam, Sikkim, Gujarat, Arunachal Pradesh, Chandigarh, Daman & Diu, Delhi, Dadra & Nagar Haveli, Mizoram, Meghalaya, Maharashtra, Nagaland, Tripura, Manipur, Karnataka	16

The allotted time varies from 2 hours to 3 hours in all the states. In forty-three per cent of the states, 3 hours are allotted for annual examination and 2 hours are allotted in thirty-one per cent of the states. In Arunachal Pradesh, combined question paper for EVS-I (Social Studies) and EVS-II (Science) is administered.

MAXIMUM MARKS FOR ANNUAL EXAMINATION

Table 18 shows maximum marks allocated for social sciences subject in the annual examination.

Table 18: Social Sciences: Marks for Annual Examination

S. No.	Marks for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	50	Chhattisgarh, Himachal Pradesh, Uttar Pradesh, Haryana, Jammu & Kashmir, Kerala, Punjab, Uttarakhand, Goa, Andhra Pradesh	10
2.	80	Manipur	01
3.	100	A & N Islands, Dadra & Nagar Haveli, Daman and Diu, Assam, Delhi, Arunachal Pradesh, Bihar, Chandigarh, Jharkhand, Gujarat, Karnataka, Mizoram, Madhya Pradesh, Meghalaya, Maharashtra, Nagaland, Orissa, Pondicherry, Rajasthan, Tripura, Tamil Nadu, Sikkim, West Bengal, Lakshadweep	24

Most of the states allocate 100 marks for the subject in the annual examination. Chhattisgarh, Himachal Pradesh, Uttar Pradesh, Haryana, Jammu & Kashmir, Kerala, Goa, Andhra Pradesh Punjab and Uttarakhand assign 50 marks to the subject in the annual examination.

TEACHING OF MOTHER TONGUE

The number of periods allotted per week to teaching of mother tongue in Class V is given in Table 19.

Table 19: Mother Tongue: Class Periods Per Week in Class V

S. No.	Periods per Week	Name of the States/UTs	No. of the States/UTs (N=34)
1.	3	Nagaland	01
2.	4	Meghalaya	01
3.	6	Chhattisgarh, Gujarat, Jammu and Kashmir, Kerala, Madhya Pradesh, Tripura, Sikkim, Dadra & Nagar Haveli, Mizoram, Punjab, Uttarakhand, Manipur, Daman & Diu, Karnataka	14
4.	7	Bihar, Delhi, Arunachal Pradesh, Assam, Lakshadweep, Jharkhand, West Bengal, Goa	08
5.	8	A & N Islands, Orissa, Pondicherry, Tamil Nadu, Chandigarh, Himachal Pradesh	06
6.	9	Uttar Pradesh	01
7.	12	Rajasthan, Andhra Pradesh	02
8.	13	Maharashtra	01

Six to seven class periods in a week are devoted to teaching of Mother Tongue by almost thirty per cent of the states. In Rajasthan and Andhra Pradesh, 12 periods per week are allocated whereas Nagaland provides only 3 periods in the weekly timetable. Maximum 13 periods are allotted in Maharashtra. In Arunachal Pradesh, Mother Tongue (local dialect/language) is taught only in case of a few tribes for 4 to 5 periods per week in a limited number of districts. The NCERT Curriculum Framework recommended 25 per cent in 1975 and 30 per cent in 1988 teaching time for this subject.

DURATION OF ANNUAL EXAMINATION

The time duration given to Mother Tongue in the annual examination by different states is shown in Table 20.

Table 20: Mother Tongue: Time Duration for Annual Examination of Class V

S. No.	Time Duration for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	2.0 hours	Andhra Pradesh, Bihar, Chhattisgarh, Kerala, Lakshadweep, Orissa, Pondicherry, Punjab, Tamil Nadu, Uttarakhand, Uttar Pradesh, Jharkhand, Rajasthan, Goa, Haryana	15
2.	2.30 hours	Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, West Bengal	05
3.	3.00 hours	A&N Islands, Assam, Dadra & Nagar Haveli, Arunachal Pradesh, Delhi, Chandigarh, Gujarat, Nagaland, Meghalaya, Manipur, Maharashtra, Mizoram, Sikkim, Tripura, Daman & Diu	15

It is observed that two to three hours are given in the annual examination for the subject of Mother Tongue. In almost forty per cent of the states/UTs, 3:00 hours for annual examination are provided. Two and half hours are provided in five states.

MAXIMUM MARKS FOR ANNUAL EXAMINATION

Total marks allotted for examination of Mother Tongue in Class V by different States/UTs are given in Table 21.

Table 21: Maximum Marks for Examination of Mother Tongue in Class V

S. No.	Marks for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	50	Chhattisgarh, Himachal Pradesh, Kerala, Uttar Pradesh, Goa, Haryana, Jammu and Kashmir, Punjab, Uttarakhand, Andhra Pradesh	10
2.	80	Manipur	01
3.	100	A&N Islands, Assam, Arunachal Pradesh, Bihar, Chandigarh, Gujarat, Karnataka, Meghalaya, Lakshadweep, Delhi, Madhya Pradesh, Maharashtra, Mizoram, Tamil Nadu, Nagaland, Orissa, Sikkim, Pondicherry, Rajasthan, Tripura, West Bengal, Dadra & Nagar Haveli, Jharkhand, Daman & Diu	24

Most of the states allocate 100 marks for annual examination except Chhattisgarh, Himachal Pradesh, Kerala, Uttar Pradesh, Goa, Haryana, Andhra Pradesh, Jammu and Kashmir, Punjab and Uttarakhand where 50 marks for examination of Mother Tongue are allocated. The NCFSE (2000) recommended 100 marks for annual examination of this subject.

TEACHING OF ENGLISH

The English language has been introduced at primary stage in many states and union territories. The status of English language is reflected in Table 22.

Table 22: Status of English Language at Primary Stage

S. No.	Class	Name of the States/UTs	No. of the States/UTs (N=35)
1.	Class I	A&N Islands, Arunachal Pradesh, Delhi, Haryana, Jammu & Kashmir, Sikkim, Nagaland, Meghalaya, Mizoram, Pondicherry, Punjab, Chhattisgarh, Maharashtra, Rajasthan, West Bengal, Goa, Uttarakhand, Tripura, Chandigarh, Himachal Pradesh, Bihar, Kerala, Manipur, Tamil Nadu, Madhya Pradesh, Karnataka	26
2.	Class III	Andhra Pradesh, Uttar Pradesh, Orissa	03
3.	Class IV	Lakshadweep	01
4.	Class V	Gujarat, Assam, Dadra & Nagar Haveli, Jharkhand, Daman & Diu	05

The English language is introduced from Class I in 26 states/UTs. Three states teach the subject from Class III onwards. Lakshadweep teaches the subject from Class IV and Gujarat, Dadra & Nagar Haveli, Daman & Diu, Jharkhand and Assam introduce this subject from Class V. The National Curriculum of 1975 and 2000 recommended that English might be introduced as a second language at primary stage if resources are available with states/UTs. The reason for introducing English language in most of the states from Class I onwards may be due to the expansion of the private schools where English language is introduced from pre-primary stage onwards. In general, the parents have started to send their children to public schools and not to Government schools. In NCF 2005, it is rightly mentioned that introduction of English is now a matter of political response by the people rather than an academic or feasibility issue.

PERIODS PER WEEK

Table 23 presents the position regarding the number of class periods per week devoted to teaching of English in Class V by different states/UTs.

Table 23: English: Periods per Week in Class V

S. No.	Periods per Week	Name of the States/UTs	No. of the States/UTs (N=34)
1.	3	Uttar Pradesh	01
2.	4	Karnataka, West Bengal, Andhra Pradesh	03
3	5	Maharashtra, Nagaland, Pondicherry, Goa	04
4.	6	Bihar, Jharkhand, Dadra & Nagar Haveli, Chhattisgarh, Gujarat, Jammu and Kashmir, Kerala, Orissa, Rajasthan, Uttarakhand, Madhya Pradesh, Tripura, Punjab, Manipur, Tamil Nadu, Daman & Diu	16
5.	7	Delhi, Lakshadweep, Meghalaya, Mizoram	04
6.	8	A & N Islands, Assam, Sikkim, Arunachal Pradesh, Chandigarh, Himachal Pradesh	06

Three to eight periods are kept in the weekly time table for teaching English in Class V. Only these periods are allotted in Uttar Pradesh. The periods allotted in different states for teaching English language may depend upon the priority given by the states.

TIME ALLOCATION IN ANNUAL EXAMINATION

The total time allotment for annual examination of English language in Class V is given in Table 24.

Table 24: English: Time Duration for Examination of Class V

S. No.	Time Allotted for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	1.30 hours	Sikkim	01
2.	2.0 hours	Andhra Pradesh, Bihar, Chhattisgarh, Haryana, Kerala, Lakshadweep, Orissa, Jharkhand, Pondicherry, Punjab, Tamil Nadu, Uttar Pradesh, Uttarakhand, Rajasthan, Goa	15
3.	2.30 hours	Himachal Pradesh, Jammu and Kashmir, Karnataka, Madhya Pradesh	04
4.	3.0 hours	A & N Islands, Assam, Chandigarh, Delhi, Mizoram, Gujarat, Daman & Diu, Manipur, Maharashtra, Meghalaya, Nagaland, Arunachal Pradesh, West Bengal, Tripura, Dadra & Nagar Haveli	15

The time duration varies from 1.30 to 3 hours. Sixteen states/UTs provided 3 hours, 15 states provided 2 hours, 4 states provide 2.30 hours and Sikkim restricted to 1.30 hours only.

MARKS FOR ANNUAL EXAMINATION

Table 25 shows the allotment of marks in annual examination of Class V for English language.

Table 25: English: Marks for Annual Examination of Class V

S. No.	Maximum Marks for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	50	Chhattisgarh, Himachal Pradesh, Haryana, Jammu & Kashmir, Uttar Pradesh, Lakshadweep, Rajasthan, Kerala, Goa, Punjab, Uttarakhand, Andhra Pradesh	12
2.	80	Manipur	01
3.	100	A & N Islands, Bihar, Chandigarh, Daman & Diu, Delhi, Gujarat, Karnataka, Maharashtra, Nagaland, Meghalaya, Orissa, Pondicherry, Tripura, Tamil Nadu, Uttar Pradesh, West Bengal, Assam, Dadra & Nagar Haveli, Jharkhand, Mizoram, Arunachal Pradesh, Madhya Pradesh	22

Majority of states provide 100 marks for English in the annual examination whereas the remaining states provide only 50 marks.

STATUS OF THREE LANGUAGE FORMULA

The status of implementation of three-language formula at primary stage is reflected in Table 26.

Table 26: Status of Implementation of Three- Language Formula

S. No.	Response	Name of the States/UTs	No. of the States/UTs (N=35)
1.	Yes	Sikkim, Lakshadweep, Manipur, Uttar Pradesh, Chandigarh, Goa, Mizoram, Jammu and Kashmir, Chhattisgarh, Bihar, Punjab, Uttarakhand, Orissa, Madhya Pradesh	14
2.	No	Maharashtra, Nagaland, A & N Islands, Andhra Pradesh, Assam, Arunachal Pradesh, Daman & Diu, Kerala, Gujarat, Jharkhand, Dadra & Nagar Haveli, Tripura, Haryana, Himachal Pradesh, Karnataka, Rajasthan, Delhi, Tamil Nadu, West Bengal, Pondicherry, Meghalaya	21

The Three-language formula is implemented only in 14 states in the country namely Sikkim, Lakshadweep, Manipur (class III onwards), Uttar Pradesh, Chandigarh, Goa, Mizoram, Jammu and Kashmir, Chhattisgarh, Bihar, Punjab, Orissa, Madhya Pradesh and Uttarakhand. Even the various National Curriculum Frameworks for School Education (1975, 1988, 2000 and 2005) have not recommended implementation of three-language formula at primary stage.

TEACHING OF MATHEMATICS

The picture of allotment of periods per week for teaching of Mathematics in Class V is presented in Table 27.

Table 27: Mathematics: Periods per Week of Class V

S. No.	Periods	Name of the States/UTs	No. of the States/UTs (N=34)
1.	5	Kerala, Meghalaya, Mizoram, Nagaland	04
2.	6	Chhattisgarh, Jammu and Kashmir, Karnataka, Madhya Pradesh, Orissa, Pondicherry, Tamil Nadu, Uttarakhand, West Bengal, Assam, Jharkhand, Tripura, Gujarat, Punjab, Manipur, Daman and Diu, Dadra & Nagar Haveli	17

3.	7	Delhi, Lakshadweep, Maharashtra, Goa	04
4.	8	A & N Islands, Arunachal Pradesh, Himachal Pradesh, Sikkim, Uttar Pradesh, Bihar	06
5.	9	Rajasthan, Chandigarh	02
6.	12	Andhra Pradesh	01

Five periods are devoted to this subject in Kerala, Meghalaya, Mizoram and Nagaland. It appears from the above table that more periods are allotted to the teaching of mathematics by all the states because mathematics is considered to be a difficult subject in general by students. The National Curriculum Framework 1975 and 1988 recommended 15 per cent of the time per week for teaching of Mathematics.

TIME DURATION IN ANNUAL EXAMINATION

Table 28 shows allotment of time in the annual examination for Mathematics in Class V.

Table 28: Mathematics: Time Duration for Annual Examination of Class V

S. No.	Total Time for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	2.0 Hours	Andhra Pradesh, Bihar, Orissa, Chhattisgarh, Kerala, Uttarakhand, Lakshadweep, Pondicherry, Tamil Nadu, Punjab, Uttar Pradesh, Jharkhand, Rajasthan, Goa, Haryana	15
2.	2.30 Hours	Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, West Bengal	05
3.	3.0 Hours	A & N Islands, Assam, Arunachal Pradesh, Chandigarh, Delhi, Daman & Diu, Gujarat, Meghalaya, Manipur, Maharashtra, Mizoram, Nagaland, Sikkim, Dadra & Nagar Haveli, Tripura	15

In 15 states, three hours are allotted for the examination of Mathematics in Class V and 2 hours are allotted in equal number of states. Two and half hours are allotted in five states.

MAXIMUM MARKS FOR EXAMINATION

Total marks allotted for Mathematics in annual examination in Class V by different states/UTs are shown in Table 29.

Table 29: Mathematics: Maximum Marks in Annual Examination of Class V

S. No.	Marks for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	50	Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, Kerala, Uttar Pradesh, Goa, Haryana, Uttarakhand, Andhra Pradesh	09
2.	80	Manipur	01
3.	100	A&N Islands, West Bengal, Sikkim, Assam, Arunachal Pradesh, Bihar, Chandigarh, Delhi, Daman & Diu, Gujarat, Orissa, Karnataka, Lakshadweep, Meghalaya, Tripura, Tamil Nadu, Madhya Pradesh, Nagaland, Maharashtra, Mizoram, Pondicherry, Punjab, Rajasthan, Dadra & Nagar Haveli, Jharkhand	25

In most of the states/UTs, 100 marks are allotted for Mathematics in Class V. Fifty marks are allotted in only nine states as mentioned above. Eighty marks are allotted only in Manipur.

HEALTH & PHYSICAL EDUCATION

Table 30 indicates the position regarding the subject of Health and Physical Education.

Table 30: Status of Health & Physical Education at Primary Stage

S. No	Status of Health & Physical Education	Name of the States/UTs	No. of the States/UTs (N=35)
01.	Compulsory	Andaman & Nicobar Islands, Andhra Pradesh, Assam, Bihar, Chandigarh, Daman & Diu, Gujarat, Karnataka, Kerala, Orissa, Lakshadweep, Nagaland, Pondicherry, Punjab, Sikkim, Rajasthan, Uttar Pradesh, Uttarakhand, West Bengal, Mizoram, Tamil Nadu, Meghalaya, Jharkhand, Maharashtra, Arunachal Pradesh, Himachal Pradesh, Manipur, Dadra & Nagar Haveli, Goa, Delhi, Chhattisgarh, Madhya Pradesh, Haryana	33
02.	Optional	Tripura, Jammu & Kashmir	02

In all the states, this subject is compulsory except Tripura and Jammu and Kashmir. In two states, it is as an optional subject at primary stage. The NCFSE 2000 recommended the nomenclature of this subject as Art of Healthy and Productive Living (AHPL).

STATUS OF EXAMINATION

Whether students are assessed in the final examination on Health and Physical Education related aspects is shown below. The responses are classified in Table 31.

**Table 31: Status of Examination of Physical & Health Education
At Primary Stage**

S. No.	Response	Name of the States/UTs	No. of the States/UTs (N=34)
1.	Yes	A&N Islands, Assam, Bihar, Daman & Diu, Delhi, Nagaland, Uttar Pradesh, Arunachal Pradesh, Jharkhand, Meghalaya, Gujarat, Dadra & Nagar Haveli, Chhattisgarh, Uttarakhand, Madhya Pradesh, Karnataka	16
2.	No	Andhra Pradesh, Chandigarh, Himachal Pradesh, Lakshadweep, Maharashtra, Orissa, Pondicherry, Rajasthan, Tamil Nadu, West Bengal, Sikkim, Goa, Mizoram, Haryana, Tripura, Jammu and Kashmir, Punjab, Manipur	18

Almost fifty per cent of the states have responded positively to this question. The National Curriculum Framework in 1975 and 1988 allocated 25 per cent time per week and 10 per cent for teaching of this subject respectively.

PERIODS PER WEEK

The allocation of periods per week for teaching of this subject in Class V is given in Table 32.

Table 32: Health & Physical Education: Periods per Week of Class V

S. No.	Periods per Week	Name of the States/UTs	No. of the States/UTs (N=29)
1.	1	Andhra Pradesh	01
1.	2	Sikkim, Assam, Mizoram, Kerala	04
2.	3	Nagaland, Arunachal Pradesh, Jammu and Kashmir, Himachal Pradesh, Punjab, Tamil Nadu, Orissa	07
3.	4	Bihar, Pondicherry, Rajasthan, Goa, Uttarakhand, Chandigarh, Karnataka	07
4.	5	Maharashtra, Uttar Pradesh, West Bengal, Meghalaya, Gujarat, Dadra & Nagar Haveli, Daman & Diu	07
5.	6	Madhya Pradesh, Manipur	02
6.	7	Delhi	01

As many as seven periods are allotted to this subject only in Delhi. It implies that practically everyday, the health and physical education subject is taught. Almost one third of the states have provided five

periods in a week. States like Sikkim, Mizoram, Kerala and Assam have only 2 periods in the weekly timetable for this subject.

DURATION OF ANNUAL EXAMINATION

The time allotted in the annual examination for Health and Physical Education in Class V by different states is classified in Table 33.

Table 33: Health & Physical Education: Time for Annual Examination of Class-V

S. No.	Time for Examination	Name of the States/UTs	No. of the States/UTs (N=11)
1.	1.30 hours	Arunachal Pradesh, West Bengal	02
2.	2.0 hours	Bihar, Uttar Pradesh, Uttarakhand	03
3.	2.30 hours	Madhya Pradesh	01
4.	3.0 hours	Nagaland, Meghalaya, Gujarat, Dadra & Nagar Haveli, Daman & Diu	05

Thirty per cent of the states provide two hours in the annual examination for the subject. States like Meghalaya, Gujarat, Dadra & Nagar Haveli, Daman & Diu and Nagaland have allotted three hours, whereas Arunachal Pradesh and West Bengal have allotted 1.30 hours only.

ART EDUCATION

The status of Art Education is given in Table 34

Table 34: Status of Art Education at Primary Stage

S. No.	Status of Art Education	Name of the States/UTs	No. of the States/UTs (N=31)
1.	Compulsory	A&N Islands, Andhra Pradesh, Assam, Bihar, Daman & Diu, Goa, Himachal Pradesh, Karnataka, Kerala, Lakshadweep, Mizoram, Nagaland, Orissa, Pondicherry, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim, Jharkhand, West Bengal, Meghalaya, Gujarat, Dadra & Nagar Haveli, Chhattisgarh, Madhya Pradesh, Haryana	29
2.	Optional	Delhi, Chandigarh	02

In almost all the states the subject is compulsory. Only in two states the subject is accorded optional status. In Chandigarh, Art Education is named as Drawing. In Manipur, Art education has recently been introduced.

The National Curriculum Framework 1975 named this subject as Work Experience whereas it was recommended as Art Education in 1988 and 2005. The NCFSE 2000 recommended the name of the subject as Art of Healthy and Productive Living (AHPL).

STATUS OF EXAMINATION

Table 35 reflects the position regarding status of examination in the subject of Art Education.

Table 35: Art Education: Status of Examination

S. No.	Response	Name of the States/UTs	No. of the States/UTs (N=31)
1.	Yes	A&N Islands, Assam, Bihar, Chandigarh, Daman & Diu, Karnataka, Mizoram, Orissa, Uttar Pradesh, Sikkim, Uttarakhand, Arunachal Pradesh, West Bengal, Madhya Pradesh, Gujarat, Dadra & Nagar Haveli, Chhattisgarh	17
2.	No	Andhra Pradesh, Himachal Pradesh, Lakshadweep, Maharashtra, Nagaland, Pondicherry, Punjab, Tamil Nadu, Rajasthan, Meghalaya, Goa, Delhi, Haryana, Kerala	14

At primary stage Art Education is an examination subject in 17 states whereas it is not an examination subject in the remaining 14 states/UTs.

PERIODS PER WEEK

The allocation of periods per week for teaching of Art Education in different states is elaborated in Table 36.

Table 36: Art Education: Periods per Week of Class V

S. No.	Periods per Week	Name of the States/UTs	No. of the States/UTs (N=27)
1.	1	Assam, Meghalaya, Pondicherry, Himachal Pradesh, Andhra Pradesh	05
2.	2	Karnataka, Manipur, Mizoram, Delhi, Chandigarh, Kerala, Punjab, Tamil Nadu, Gujarat, Dadra & Nagar Haveli, Daman & Diu	11
3.	3	Nagaland, Orissa, Arunachal Pradesh	03
4.	4	Bihar, Uttar Pradesh, Maharashtra, Rajasthan, Chandigarh, Goa	06
5.	6	Madhya Pradesh, Uttarakhand	02

In Assam, Himachal Pradesh, Meghalaya, Andhra Pradesh and Pondicherry states one period is allotted. Six periods are allotted by Madhya Pradesh and Uttarakhand states. The National Curriculum

Framework for School Education recommends 25 per cent and 15 per cent per week in 1975 and 1988 for teaching this subject.

WORK EDUCATION

The nomenclature of Work Education by various states is presented in Table 37.

Table 37: Nomenclature of Work Education at Primary Stage

S. No.	Nomenclature of Work Education	Name of the States/UTs	No. of the States/UTs (N=31)
1.	Socially Useful Productive Work (SUPW)	A & N Islands, Andhra Pradesh, Karnataka, Lakshadweep, Punjab, Arunachal Pradesh, Sikkim, Delhi, Madhya Pradesh, Meghalaya, Haryana	11
2.	Work Experience (WE)	Assam, Kerala, Mizoram, Nagaland, Pondicherry, Rajasthan, Tripura, Maharashtra, Bihar, Uttarakhand	10
3.	Productive and Creative Work (PCW)	West Bengal	01
4.	Craft	Goa, Tamil Nadu	02
5.	SUPW + Work Experience + Work Education	Chhattisgarh, Manipur	02
6.	Work Education	Orissa, Gujarat, Dadra & Nagar Haveli, Daman & Diu	04
7.	SUPW + Work Experience	Uttar Pradesh	01

Among the states, which provided information on the subject 11 states/UTs, work education was named as Social Useful Productive Work (SUPW) and 10 states/UTs, named it as Work Experience. In Tamil Nadu, it is known as Life Oriented Education. In West Bengal, it is called Productive and Creative Work. In Chandigarh, work education is known as Craft. The Curriculum Framework developed in 1975 had named it as Work Experience and Art whereas in 1988 it was named as Work Experience. The NCFSE 2000 recommended the subject under the name of Art of Healthy and Productive Living. Work Education is a compulsory subject in all the states/UTs.

PERIODS PER WEEK

The allotment of periods in different states for Work Education in Class V is shown in Table 38.

Table 38: Work Education: Periods per Week at Primary Stage in Class V

S. No.	Periods per Week	Name of the States/UTs	No. of the States/UTs (N=24)
1.	1	Meghalaya, Andhra Pradesh	02
2.	2	Sikkim, Assam, Mizoram, Gujarat, Dadra & Nagar Haveli, Punjab, Tamil Nadu, Daman & Diu	08
3.	3	Kerala, Arunachal Pradesh	02
4.	4	Karnataka, Maharashtra, Pondicherry, Rajasthan, West Bengal, Goa	06
5.	5	Bihar, Uttar Pradesh	02
6.	6	Madhya Pradesh, Uttarakhand	02
7.	7	Delhi, Orissa	02

Seven periods in Delhi and Orissa whereas six periods in Madhya Pradesh and Uttarakhand, and five periods in Bihar and Uttar Pradesh are allotted to Work Education. But in Meghalaya and Andhra Pradesh only one period is allotted. For the annual examination the time allotted was one hour in Orissa and two and half hours in Uttar Pradesh and Madhya Pradesh. Both grades and marks are awarded for evaluation purposes. The National Curriculum Framework recommended 25 per cent and 20 per cent time per week for work education in 1975 and 1988 respectively.

VALUE AND MORAL EDUCATION

Value and Moral Education are taught in primary classes. The periods allotted per week for the subject in Class V are limited to one in Uttarakhand, three in Andhra Pradesh and two in Karnataka, Uttar Pradesh, Chandigarh and Sikkim, four in Goa and six in Madhya Pradesh and Orissa. The time duration for annual examination is one to two hours.

MECHANISM FOR EVALUATION

Evaluation is an integral part of curriculum. The picture regarding evaluation is reflected in Table 39.

Table 39: Mechanism for Evaluation of Curriculum at Primary stage

S. No.	Mechanism for Evaluation of Curriculum	Name of the States/UTs	No. of the States/UTs(N=33)
1.	Marking	Tamil Nadu, Sikkim, Chhattisgarh, Lakshadweep, Punjab, Mizoram, Tripura, Nagaland, Jammu and Kashmir, Manipur, Gujarat, Dadra & Nagar Haveli, Daman & Diu, Chandigarh, Andhra Pradesh	15
2.	Marking for Scholastic and Grading for Co-scholastic Areas	Karnataka, A&N Islands, Assam, Goa, Pondicherry, Uttar Pradesh, Delhi, West Bengal, Maharashtra, Rajasthan, Meghalaya, Uttarakhand, Himachal Pradesh, Orissa, Arunachal Pradesh, Haryana	16
3.	Grading	Bihar, Kerala	02

Marks are awarded in 15 states. In the remaining states, marking system is used for scholastic areas and grading system for co- scholastic areas. In Madhya Pradesh, the mechanism for evaluation of curriculum at primary stage is approved by Madhya Pradesh Books Committee constituted by Madhya Pradesh Government. In Tamil Nadu, Grading from classes I to IV and Marking in class V is introduced. Grading system is followed in Bihar and Kerala for scholastic and co-scholastic areas.

IMPLEMENTATION OF CONTINUOUS COMPREHENSIVE EVALUATION

The status of implementation of continuous and comprehensive evaluation at primary stage is given in Table 40

Table 40: Implementation of Continuous and Comprehensive Evaluation

S. No.	Response	Name of the States/UTs	No. of the States/UTs (N=34)
1.	Yes	Maharashtra, Nagaland, Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Jharkhand, Daman & Diu, Uttar Pradesh, Gujarat, Dadra & Nagar Haveli, Jammu & Kashmir, Karnataka, Lakshadweep, Madhya Pradesh, Uttarakhand, Rajasthan, Punjab, West Bengal, Tripura, Himachal Pradesh, Kerala, Manipur, Goa, Chhattisgarh	25
2.	No	Meghalaya, Delhi, Orissa, Pondicherry, Mizoram, Haryana, Sikkim, A&N Islands, Tamil Nadu	09

It is clear from the above table that the continuous and comprehensive evaluation (CCE) is implemented in only 25 States/UTs. In Chhattisgarh and Goa it is under process.

SUGGESTIONS MADE BY THE STATES FOR IMPROVING THE PRIMARY STAGE SCHOOL CURRICULUM

The following are the suggestions made by the various states.

- The gap between curriculum planning, formulation and its implementation should be minimized. Curriculum should be revised and reviewed after every five years (*Assam, Chandigarh*)
- The social, cultural, demographic, environmental and economic conditions of the country should be kept in mind while developing school curriculum. (*Delhi, Maharashtra, Uttarakhand, and Lakshadweep*)
- The activity based approach, learning by doing, learning without burden and joyful learning should be followed in preparing curriculum. (*U.P. Madhya Pradesh, J&K, Haryana, Gujarat and Andhra Pradesh*)
- Both Physical Sciences and Social Sciences should be integrated into Environmental Studies. (*Haryana*)
- The integrated approach should be followed in preparing the textbooks. It will lessen the burden on children. The essential/core components of curriculum should be followed for maintaining equal standards. (*Mizoram, Assam, Andhra Pradesh, Orissa, Gujarat*)
- All sections of the society should be involved while preparing curriculum. (*Rajasthan, Punjab, Madhya Pradesh*)
- Rigorous intensive in-service training for primary school teachers should be organized for their capacity development in different subjects on a regular basis. Monitoring and supervision of in-service training should be conducted regularly. (*Punjab, Chhattisgarh*)
- Continuous and comprehensive evaluation should be made more effective and should be included in the curriculum. (*West Bengal, Sikkim, Delhi, Maharashtra, J & K, Kerala, M.P., Pondicherry, Goa, Uttar Pradesh, Haryana and Arunachal Pradesh*):

* * * * *

Chapter 3

Status of School Curriculum: Upper Primary Stage

In this section, the findings related to the implementation of school curriculum at the Upper Primary Stage in different states are presented.

STRUCTURE

The classes covered under the Upper Primary Stage of school education in different states are shown in Table 1.

Table 1: Structure at Upper Primary Stage

S. No.	Structure	Name of the States/ UTs	No. of the States/ UTs (N= 35)
1.	VI - VIII	A & N Islands, Arunachal Pradesh, Bihar, Chandigarh, Chhattisgarh, Delhi, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Manipur, Maharashtra, Pondicherry, Punjab, Rajasthan, Sikkim, Tripura, Tamil Nadu, Uttar Pradesh, Uttarakhand, Jharkhand, Nagaland, Gujarat, Dadra & Nagar Haveli, Daman & Diu, Orissa, Haryana, Karnataka	27
2.	VI - VII	Andhra Pradesh	01
3.	V - VII	Assam, Goa, Kerala, Lakshadweep, Meghalaya, Mizoram	06
4.	V - VIII	West Bengal	01

As reflected in Table 1, the upper primary stage includes Classes VI to VIII in 27 states/UTs, V to VII in six states and VI and VII only in Andhra Pradesh. In West Bengal classes V to VIII constitute the upper primary stage.

The 1975 Curriculum for Ten Years Schooling, the NPE 1986, the 1988 National Curriculum for Elementary and Secondary Education, and the NCFSE 2000 and NCF 2005 recommended classes VI to VIII under the upper primary stage of school education.

However, the majority of states are following the recommended national structure of upper primary stage. The remaining states may also follow this structure. It will help in implementing the centrally sponsored schemes in an effective manner.

AGENCY FOR CONSTRUCTING CURRICULUM

The agencies involved in curriculum development for the upper primary stage in different states are shown in Table 2.

Table 2: Agency for Constructing Curriculum and Syllabus at Upper Primary Stage

S. No.	Agency for Constructing Curriculum	Name of the States/UTs	No of the States/UTs (N=35)
1.	NCERT	Arunachal Pradesh, A&N Islands, Chandigarh, Delhi, Himachal Pradesh, Jharkhand, Haryana	07
2.	SIE	Sikkim	01
3.	SCERT	Andhra Pradesh, Bihar, Orissa (TE), Chhattisgarh, Tamil Nadu, Karnataka, Kerala, Madhya Pradesh, Uttar Pradesh (SIE), Gujarat, Maharashtra, Rajasthan(SIERT), Dadra & Nagar Haveli, Uttarakhand, Meghalaya, Lakshadweep, Nagaland, Tripura (TBSE) , Daman & Diu, Goa	20
4.	Board of School Education/ Board of Secondary Education	West Bengal, Punjab, Assam, Pondicherry, Mizoram, Jammu & Kashmir, Manipur	07

The SCERT is responsible for constructing school curriculum in twenty states. The Board of School Education/Secondary Education constructs curriculum in seven states and an equal number of states follow NCERT curriculum and syllabus. However, in Meghalaya SCERT & Board of School Education are jointly responsible for the upper primary stage curriculum and text books.

NUMBER OF WORKING DAYS

The numbers of working days schools function in an academic year in different states are indicated in Table 3.

Table 3: Number of Working Days in a Year at Upper Primary Stage

S. No	No of Working Days	Name of States /UTs	No. of States/ UTs (N=35)
1.	180-200	Assam (200), Nagaland (200), Pondicherry (200) , Manipur (180)	04
2.	201-220	A & N Islands (215), Andhra Pradesh (220), Arunachal Pradesh (220), Goa (220), Haryana (220), Jammu & Kashmir (220), Karnataka (220), Tripura (220), Lakshadweep (220), Meghalaya (220), Mizoram (210), Delhi (210), Uttarakhand (220), Uttar Pradesh (220), Chhattisgarh (220), Kerala (210), Tamil Nadu (220) , Madhya Pradesh (214)	18
3.	221-240	Maharashtra (230), Orissa (234), West Bengal (236), Rajasthan (240), Sikkim (230), Gujarat (232), Dadra & Nagar Haveli (232), Daman & Diu (232)	08
4.	241-260	Bihar (253), Jharkhand (253), Himachal Pradesh (242), Punjab (242) , Chandigarh (245)	05

The number of working days, as reported by the respective states, ranges from 180 to 253 days. In three states, schools function for 200 days, between 201 to 220 days in eighteen states, 221 to 240 days in eight states and 242 to 253 days in five states. The 1975 NCERT Curriculum Framework recommended minimum 240 working days (220 for instruction and 20 days for school camps and community services) and 200 working days were recommended in the 1988 and 2005 Curriculum Frameworks and 180 working days by the NCFSE 2000. Most of the states are following the recommendations of National Curriculum Frameworks.

DURATION OF SCHOOL HOURS

The number of hours schools function in a day in respective states is shown in Table 4.

Table 4: Duration of School Hours at Upper Primary Stage

S. No.	Total duration of School day	Name of the States/UTs	No. of the States/UTs (N=35)
1.	7.00 Hours	Sikkim	01
2.	6.10 Hours	Gujarat, Dadra & Nagar Haveli, Daman & Diu	03
3.	6.00 Hours	A&N Islands, Bihar, Jammu & Kashmir, Kerala, Karnataka, Chandigarh, Haryana, Orissa, Himachal Pradesh, Meghalaya, Punjab, Rajasthan, Uttar Pradesh, Arunachal Pradesh, Jharkhand, Delhi, Madhya Pradesh, Andhra Pradesh	18
4.	5.45 Hours	Nagaland, Pondicherry	02
5.	5.40 Hours	Tamil Nadu	01
6.	5.30 Hours	Assam, Lakshadweep, Mizoram, Uttarakhand, Goa, West Bengal	06

7.	5.20 Hours	Tripura	01
8.	5.15 Hours	Maharashtra, Manipur	02
9.	5.00 Hours- 6.00 Hours	Chhattisgarh	01

The duration of school hours per day ranges from five to seven hours. In eighteen states schools function for 6 hours in a day, in six states for 5 hours 30 minutes and in one state for 5 hours. The NCERT Curriculum Framework 1975, 1988, 2000 and 2005 recommended five hours for effective instruction and one hour for morning assembly, recess and other routine activities. It means most of the states are following the recommendations of NCFs, but some states are not following them due to their socio-economic and geographical conditions and formulate the curricular and co-curricular activities according to their special needs.

PERIODS PER WEEK

Total number of class periods in a week in different states are presented in Table 5.

Table 5: Total No. of Periods in a Week at Upper Primary Stage

S. No.	Total No of Periods in a Week	Name of the States/UTs	No. of the States/UTs(N=35)
1.	54	Himachal Pradesh, Haryana	02
2.	52	Maharashtra	01
3.	48	A&N Islands, Goa, Delhi, Lakshadweep, Rajasthan, Andhra Pradesh, Sikkim, Chandigarh, Uttarakhand, Uttar Pradesh, Punjab	11
4.	45	Bihar, Karnataka, Arunachal Pradesh, Jharkhand, Gujarat, Dadra & Nagar Haveli, Daman & Diu	07
5.	44	Assam, West Bengal	02
6.	42	Orissa	01
6.	40	Meghalaya, Tamil Nadu	02
7.	39	Tripura, Manipur	02
8.	36	Madhya Pradesh, Jammu & Kashmir, Chhattisgarh	03
9.	35	Kerala, Pondicherry, Nagaland, Mizoram	04

In eleven out of thirty-five states, the number of class periods in a week adds up to 48. The highest number is 54 class periods reported by two states and the lowest 35 class periods reported by four states. In West Bengal 36 periods are allotted for class VI and 38 periods where third language is included. 44 periods are allotted for class VII and VIII in West Bengal, Orissa and Assam and Madhya Pradesh, 36 periods per week for normal schools and 18 periods per week for ALM schools. The National curriculum Framework (1975) recommended 48 periods per week.

DURATION OF A CLASS PERIOD

The time duration for a class period for teaching purpose varies from state to state. Table 6 includes this information.

Table 6: Duration of a Class Period

S. No.	Duration of the Period	Name of the States/UTs	No. of the States/UTs (N=35)
1.	45 Minutes	Andhra Pradesh, Assam, Kerala, Tamil Nadu, Manipur, Nagaland, Pondicherry, Jammu & Kashmir, Madhya Pradesh, Meghalaya	10
2.	40 Minutes	A&N Islands, Chandigarh, Karnataka, Lakshadweep, Mizoram, Orissa, Punjab, Rajasthan, Tripura, Uttar Pradesh, Arunachal Pradesh, Sikkim, West Bengal, Bihar, Jharkhand, Delhi, Chhattisgarh	17
3.	35 Minutes	Daman & Diu, Goa, Himachal Pradesh, Maharashtra, Uttarakhand, Haryana, Gujarat, Dadra & Nagar Haveli	08

The duration of a class period varies from 35 to 45 minutes. 17 states have reported the duration as 40 minutes, whereas in ten states, it is 45 minutes, in another eight states, it is 35 minutes. In Uttarakhand it is 35 minutes in summer and 40 minutes in winter. In West Bengal 40 minutes are allotted for 4 periods and 35 minutes for another 4 periods. In Uttarakhand, first 4 periods are of 40 minutes and last 4 periods are of 35 minutes. The National Curriculum Framework 1975, 1988, 2000 and 2005 recommended around 40 minutes per class period. It means most of the states are following the recommendations of NCFs.

NUMBER OF RECESS PERIODS

Number of recess periods provided by schools in different states at the upper primary stage is shown in Table 7.

Table 7: No. of Recess Periods at Upper Primary Stage

S. No	Number of Recess Periods	Name of the States/UTs	No. of the States (N=35)
1.	1	A&N Islands, Assam, Bihar, Chandigarh, Delhi, Goa, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Manipur, Meghalaya, Nagaland, Tripura, Pondicherry, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, West Bengal, Sikkim, Arunachal Pradesh, Orissa	23
2.	2	Lakshadweep, Maharashtra, Tamil Nadu, Sikkim, Mizoram	05
3.	3	Gujarat, Kerala, Andhra Pradesh, Dadra & Nagar Haveli, Chhattisgarh, Daman & Diu, Madhya Pradesh	07

In twenty-three states, only one recess period is provided during the school day. Five states provide two recesses and seven states observe three recesses. In Madhya Pradesh, one long recess period of 30 minutes and two short recess periods of 5 minutes each are there at upper primary stage. It means that more than one recess period is there in those states, where school hours are of longer duration.

DURATION OF RECESS PERIOD

The time allotted for recess break is mentioned in Table 8.

Table 8: Duration of Recess Period

S. No.	Duration of Recess Period	Name of the States/UTs	No of the States/UTs (N=35)
	80 minutes	Kerala, Andhra Pradesh	02
	50 minutes	Mizoram, Sikkim, Gujarat, Dadra & Nagar Haveli, Daman & Diu, , Chhattisgarh	06
	45 minutes	Manipur, Jammu & Kashmir	02
	40 minutes	A & N Islands, Maharashtra, Orissa, Arunachal Pradesh, Karnataka, Madhya Pradesh	06
	35 minutes	Punjab	01
	30 minutes	Assam, Bihar, Himachal Pradesh, Jharkhand, Uttar Pradesh, Meghalaya, Tripura, Nagaland, Rajasthan, Uttarakhand, West Bengal	11
	20 minutes	Chandigarh, Delhi, Tamil Nadu, Lakshadweep, Haryana, Goa	06
	15 minutes	Pondicherry	01

Total time allotted to recess during the school day ranges from 15 minutes in Pondicherry to 80 minutes in Andhra Pradesh (10M+75M+10M) and Kerala. In the case of states which have only one recess period, the time varies from 15 minutes to 50 minutes. Two or more recess periods are provided in the following states:

Gujarat (10M+30M+10M)

Kerala (10M+60M+10M)

Andhra Pradesh (10M+75M+10M)

Chhattisgarh (10M+30M)

Lakshadweep (10M+10M)

Maharashtra (30M+10M)

Orissa (10M+30M)

Tamil Nadu (10M+10M)

Sikkim (15M+35M)

No doubt, due to more recess breaks, the duration of school hours has increased but it will help in breaking the monotony and make the children ready again for teaching learning process.

TEACHING OF SCIENCE

The existing nomenclature of science in different states/UTs is given in Table 9.

Table 9: Nomenclature of Science at Upper Primary Stage

S. No	Nomenclature	Name of the States/UTs	No of the States/UTs (N=35)
1.	General Science	A&N Islands, Andhra Pradesh, Assam, Arunachal Pradesh, Kerala, Chandigarh, Goa, Himachal Pradesh, Lakshadweep, Maharashtra, Jammu & Kashmir, Jharkhand, Chhattisgarh, Punjab, Tamil Nadu	15
2.	Science	Haryana, Tripura, Rajasthan, Pondicherry, Karnataka, Meghalaya, Sikkim, Nagaland, Madhya Pradesh, Mizoram, Uttarakhand, Bihar, Orissa, Manipur	14
3.	Integrated Science	Uttar Pradesh	01
4.	Physics, Biology, Chemistry	West Bengal	01
5.	Science & Technology	Gujarat, , Dadra & Nagar Haveli, Daman & Diu	03
6.	Natural Science	Delhi	01

The nomenclature of science at upper primary stage in 15 states is General Science. In 14 states, it is called Science. In West Bengal, it is named as Physics, Chemistry and Biology. Biology (Life Science) is taught in Class VI and Physics and Chemistry (Physical Sciences) are taught in Classes VII & VIII. In West Bengal, the nomenclature of science subjects is General Science in class VI & life Science, physical science from classes VII-VIII. In Delhi, the nomenclature of science subject is Natural Science at upper primary stage. In Uttar Pradesh it is Integrated Science.

In classes I-II, Science, Social Studies and Health Education are integrated in the subject AHPL. In classes III-IV, Science and Social studies are integrated in Environmental Studies (EVS).

The 1975, 1988 and 2005 Curriculum Framework named this subject as Science whereas the NCFSE (2000) recommended as Science and Technology at the upper primary stage. But most of the states named it as General Science and did not follow the national norms. It may be due to the combined or condensed contents from both the disciplines of physical and life sciences in this subject.

APPROACHES FOR TEACHING OF SCIENCE

Approaches followed by different states/ UTs for teachings of science at upper primary stage are given in Table 10.

Table 10: Approaches to Teach Science at Upper Primary Stage

S. No	Approach	Name of the States/UTs	No of the states/UTs (N=35)
1.	Integrated Approach	Andhra Pradesh, Delhi, Gujarat, Himachal Pradesh, Jammu & Kashmir, Punjab, Karnataka, Kerala, Lakshadweep, Manipur, Arunachal Pradesh, Tamil Nadu, Nagaland, Pondicherry, Sikkim, Uttar Pradesh, Meghalaya Uttarakhand, Dadra & Nagar Haveli, Mizoram, Daman & Diu	21
2.	Disciplinary Approach	Bihar, Rajasthan, Maharashtra, A&N Islands, Chandigarh, Madhya Pradesh, Assam, Orissa, Tripura, Jharkhand, Goa, Haryana, West Bengal	13
3.	Both	Chhattisgarh	01

The 'integrated approach' was used for teaching Science in 21 states whereas in the remaining 13 states, 'disciplinary approach' was followed. In Chhattisgarh, both the approaches are followed. The 1975, 1988 and 2000 Curriculum Frameworks recommended integrated approach, whereas thematic and integrated

approaches have been recommended in NCF-2005. It means most of the states are following the integrated approach for teaching science as recommended in NCFs.

PERIODS PER WEEK

Weekly number of class periods devoted to teach Science in Class VIII in different states is shown in Table 11.

Table 11: Science: Periods per Week in Class VIII

S. No.	Periods per Week	Name of the States/UTs	No. of the States/UTs (N=35)
1.	5	Maharashtra, Nagaland, Orissa, Uttar Pradesh	04
2.	6	Bihar, Chandigarh, Daman & Diu, Chhattisgarh, Gujarat, Pondicherry, Jammu & Kashmir, Madhya Pradesh, Rajasthan, Tripura, Sikkim, Uttarakhand, Karnataka, Assam, Dadra & Nagar Haveli, Jharkhand, Meghalaya, Mizoram, Himachal Pradesh, West Bengal, Kerala, Punjab, Manipur, Haryana	24
3.	7	Lakshadweep, Tamil Nadu, Goa	03
4.	8	A&N Islands, Andhra Pradesh, Arunachal Pradesh, Delhi	04

The number of periods allotted for teaching of Science varies from five to eight. In 24 states, six periods are allotted, in three states, seven periods and in other three states, eight periods. It appears from the above that there are variations in allotment of periods for teaching this subject in different states but all the states have allotted to it more periods than to other subjects. In general, it is considered a difficult subject by students as compared to other subjects.

TIME DURATION OF ANNUAL EXAMINATION

Table 12 provides information about the time allotted to science in annual examination for Class V

Table 12: Time Allotted for Examination of Science in Class VIII

S. No.	Total Time Duration of Examination	Name of the States/UTs	No of the States/UTs (N=35)
1.	2:00 Hours	Bihar, Jharkhand, Lakshadweep, Orissa, Uttar Pradesh, Goa	06
2.	2:30 Hours	Andhra Pradesh, Pondicherry, Rajasthan, Chhattisgarh, Kerala, Uttarakhand, Tamil Nadu	07
3.	3:0 Hours	A&N Islands, Assam, Chandigarh, Delhi, Daman & Diu, Gujarat, Haryana, Himachal Pradesh, Meghalaya, Manipur, Madhya Pradesh, Maharashtra, Mizoram, Nagaland, Punjab, Tripura, Arunachal Pradesh, Sikkim, Karnataka, Dadra & Nagar Haveli, Jammu & Kashmir	21
4.	5:40 Hours	West Bengal	01

The time duration ranges from 2 to 5:40 hours in the annual examination. The variations in time allotment for annual examination may be on the basis of content prescribed in this subject by respective states.

MARKS ALLOCATION IN ANNUAL EXAMINATION

Total marks allotted by different states/UTs for the annual examination of Science are given in Table 13.

Table 13: Marks Allotted for Examination of Science in Class VIII

S. No.	Maximum Marks for Examination	Name of the States/UTs	No of the States/UTs (N=35)
1.	50	Lakshadweep, Jammu & Kashmir, Chhattisgarh, Goa	04
2.	75	Kerala	01
3.	80	Manipur	01
4.	100	A & N Islands, Andhra Pradesh, Assam, Bihar, Chandigarh, Daman & Diu, Gujarat, Haryana, Himachal Pradesh, Karnataka, Meghalaya, Madhya Pradesh, Maharashtra, Mizoram, Nagaland, Orissa, Pondicherry, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh, Arunachal Pradesh, Sikkim, Jharkhand, Dadra & Nagar Haveli, Delhi	28
5.	200	West Bengal	01

Allocation of marks varies from 50 to 200. In most of the states (80%), 100 marks are allotted for annual examination of Sciences of Class VIII. In Uttarakhand 80 marks for written exam 10 marks for project and

10 marks for annual work. In West Bengal, 200 marks for two papers were allotted for annual examination.

TEACHING OF SOCIAL SCIENCES

The nomenclature used in different states for Social Sciences at Upper Primary Stage is given in Table 14.

Table 14: Nomenclature of Social Sciences at Upper Primary Stage

S. No	Nomenclature	Name of the States/UTs	No of the States/UTs (N=35)
1.	Social Studies	Andhra Pradesh, Chandigarh, Uttar Pradesh, Sikkim Himachal Pradesh, Assam, Meghalaya, Chhattisgarh	08
2.	Social Sciences	A&N Islands, Delhi, Jammu & Kashmir, Arunachal Pradesh, Bihar, Karnataka, Kerala, Jharkhand, Lakshadweep, Nagaland, Manipur, Pondicherry, Rajasthan, Tamil Nadu, Maharashtra, Mizoram, Gujarat, Dadra & Nagar Haveli, Punjab, Uttarakhand, Daman & Diu, Madhya Pradesh	22
3.	History, Geography, Civics	Tripura, Haryana	02
4.	History and Geography	West Bengal, Goa	02
5.	History, Political Science and Geography	Orissa	01

In eight states, social sciences are called 'Social Studies', whereas in twenty two states, the subject is called 'Social Sciences'. In two states, the subject is named as History, Geography and Civics. In Uttar Pradesh social science is named as Hamara Samajik Jeevan.

In class's I-II, Science, Social Studies and Health Education are integrated in the subject AHPL. In classes III-IV Science and Social studies are integrated in Environmental Studies (EVS).

In more than fifty per cent of the states, the nomenclature is 'Social Sciences' as recommended in NCFs. The other states may also consider changing the nomenclature to bring commonality in the curriculum.

APPROACHES FOR TEACHING OF SOCIAL SCIENCES

Approaches followed in different states/ UTs for teaching Social Sciences are given in table 15.

Table 15: Approaches for Teaching Social Sciences

S. No	Approach	Name of the States/UTs	No of the States/UTs (N=35)
1	Integrated Approach	Andhra Pradesh, Dadra & Nagar Haveli, Arunachal Pradesh, Gujarat, Himachal Pradesh, Kerala, Jammu & Kashmir, Karnataka, Lakshadweep, Mizoram, Nagaland, Pondicherry, Tamil Nadu, Uttarakhand, Meghalaya, Daman & Diu, Punjab, Manipur	18
2	Disciplinary Approach	Bihar, Chhattisgarh, Goa, Delhi, Madhya Pradesh, Orissa, Sikkim, Rajasthan, West Bengal, Assam, A&N Islands, Tripura, Maharashtra, Jharkhand, Haryana, Chandigarh	16
3.	Both integrated and disciplinary approaches	Uttar Pradesh	01

The integrated approach is followed in 18 states, whereas disciplinary approach is followed in the remaining 16 states/UTs. The National Curriculum Framework (1975, 1988 and 2000) recommended the integrated approach. However, NCF (2005) recommended disciplinary approach in teaching of social sciences. These approaches may also depend on the textual material, whether it has been developed on thematic or disciplinary basis.

PERIODS PER WEEK

Number of periods per week for teaching the subject of Social Sciences in Class VIII in different states/UTs is given in Table 16

Table 16: Social Sciences: Periods per Week in Class VIII

S. No	Periods per Week	Name of the States/UTs	No of the States/UTs (N=35)
1.	2	Orissa	01
2.	5	Lakshadweep, Nagaland, Pondicherry, Meghalaya, Uttar Pradesh	05
3.	6	Andhra Pradesh, Bihar, Sikkim, Chandigarh, Chhattisgarh, Jammu & Kashmir, Karnataka, Mizoram, Daman & Diu, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tripura, Uttarakhand, Jharkhand, Gujarat, Himachal Pradesh, Dadra & Nagar Haveli, West Bengal, Kerala, Manipur, Tamil Nadu, Haryana	24
4.	7	Assam, Goa	02
5.	8	A&N Islands, Arunachal Pradesh, Delhi	03

In 24 states, six periods per week are allotted for teaching the subject. In other states, the number of periods varies from two in Orissa to eight in Arunachal Pradesh, Delhi and A & N Islands. History & Geography are taught instead of Social Science in West Bengal. The National Curriculum Framework (1975) recommended six periods per week whereas 12 per cent of the total time was allocated in the 1988 Framework. The NCFSE 2000 recommended 210 periods per year for teaching this subject. Majority of the states are following the national norms and have allotted six or more periods per week for teaching this subject.

DURATION OF ANNUAL EXAMINATION

The time allotted in annual examination for Social Sciences in Class VIII is given in Table 17.

Table 17: Social Sciences: Time Allotted for Examination

S. No	Total Time for Examination	Name of the States/UTs	No of the States/UTs (N=35)
1.	1.0 Hours	Orissa	01
2.	2.0 Hours	Bihar, Kerala, Lakshadweep, Jharkhand, Uttar Pradesh, Goa	06
3.	2.30 Hours	Andhra Pradesh, Pondicherry, Rajasthan, Chhattisgarh, Uttarakhand, Tamil Nadu	06
4.	3.0 Hours	A&N Islands, Assam, Meghalaya, Chandigarh, Delhi, Gujarat, Himachal Pradesh, Haryana, Mizoram, Madhya Pradesh, Manipur, Dadra & Nagar Haveli, Sikkim, Maharashtra, Nagaland, Punjab, Tripura, Arunachal Pradesh, Daman & Diu, Jammu & Kashmir, Karnataka	21
5.	11.20 Hours	West Bengal	01

In 21 states, three hours are allotted for annual examination. Whereas, in six states the time is two and half-hours. It was two hours only for annual examination in the remaining states.

MARKS IN ANNUAL EXAMINATION

Table 18 shows the allocation of marks in annual examination for Social Sciences subject.

Table 18: Social Sciences: Marks Allotted in Annual Examination of Class VIII

S. No.	Maximum Marks for Examination	Name of the States/UTs	No of the States/UTs (N=35)
1.	50	Jammu & Kashmir, Kerala, Lakshadweep, Chhattisgarh, Orissa	05
2.	80	Manipur, Goa	02
3.	100	A&N Islands, Andhra Pradesh, Assam, Bihar, Chandigarh, Daman & Diu, Gujarat, Himachal Pradesh, Haryana, Karnataka, Mizoram, Madhya Pradesh, Meghalaya, Maharashtra, Nagaland, Dadra & Nagar Haveli, Pondicherry, Punjab, Rajasthan, Tripura, Tamil Nadu, Uttar Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim, Jharkhand, Delhi	27
4.	200	West Bengal	01

In 27 states, 100 marks are allotted. In the five states, the allotted marks are 50. But 200 marks are allotted for two papers in West Bengal. In Uttarakhand, 80 marks are allotted for written examination, 10 marks for project work and 10 marks for annual work/ session work.

TEACHING OF MOTHER TONGUE

The periods allotted per week for teaching of Mother Tongue in Class VIII are shown in Table 19. Weekly periods for teaching Mother Tongue vary from 4 to 13.

Table 19: Mother Tongue: Periods per Week for Class VIII

S. No.	Period for Week	Name of the States/UTs	No of the States/UTs (N=35)
1.	4	Lakshadweep, Mizoram, Nagaland	03
2.	5	Bihar, Arunachal Pradesh, Jharkhand, Meghalaya, Goa	05
3.	6	Chandigarh, Chhattisgarh, Daman & Diu, Jammu & Kashmir, Madhya Pradesh, Uttar Pradesh, Orissa, Pondicherry, Sikkim, West Bengal, Rajasthan, Uttarakhand, Gujarat, Himachal Pradesh, Dadra & Nagar Haveli, Kerala, Punjab, Manipur, Karnataka, Andhra Pradesh	20
4.	7	Delhi, Tamil Nadu	02
5.	8	A&N Islands, Assam, Tripura, Haryana	04
6.	13	Maharashtra	01

The National Curriculum Framework (1975) recommended eight periods per week whereas 32 per cent of total teaching time was allotted in the 1988 Framework. In Arunachal Pradesh, Mother Tongue in the form of local dialect/language is taught in case of only a few tribes in a limited number of districts. English is taught as first language whereas Hindi is taught as second language at primary stage. The findings of the study are in conformity with recommendations of NCFs. The majority of the states had allocated more than six periods for teaching mother tongue.

DURATION FOR ANNUAL EXAMINATION

Time provided in the annual examination for Mother Tongue is shown in Table 20.

**Table 20: Mother Tongue: Time Duration in Annual Examination
for Class VIII**

S. No	Total Time for Examination	Name of the States/UTs	No of the states/UTs (N=35)
1.	2.0 Hours	Bihar, Jharkhand, Lakshadweep, Uttar Pradesh, Orissa, Goa	06
2.	2.30 Hours	Andhra Pradesh, Chhattisgarh, Pondicherry, Rajasthan, Tamil Nadu, West Bengal, Uttarakhand	07
3.	3.0 Hours	A&N Islands, Assam, Daman & Diu, Chandigarh, Gujarat, Dadra & Nagar Haveli, Himachal Pradesh, Haryana, Punjab, Mizoram, Madhya Pradesh, Manipur, Meghalaya, Nagaland, Maharashtra, Tripura, Sikkim, Arunachal Pradesh, Delhi, Jammu & Kashmir, Karnataka	21
4.	4.0 Hours	Kerala	01

It is clear from the above table that three hours are allotted for examining students of Class VIII in Mother Tongue. Some states allocate 2.30 hours. Whereas, some other states provide only two hours. The duration for annual examination in Mother Tongue in different states may depend on the content and syllabus prescribed for this subject.

MARKS FOR EXAMINATION

Marks allotted to Mother Tongue in the annual examination in Class VIII are classified by states in Table 21.

Table 21: Mother Tongue: Marks for Examination

S. No	Maximum Marks for Examination	Name of the States/UTs	No of the states/UTs (N=35)
1.	50	Lakshadweep, Jammu & Kashmir, Chhattisgarh, Goa	04
2.	80	Manipur	01
3.	100	A&N Islands, Andhra Pradesh, Delhi, Assam, Bihar, Chandigarh, Daman & Diu, Orissa, Gujarat, Himachal Pradesh, Haryana, Mizoram, Meghalaya, Madhya Pradesh, Sikkim, Maharashtra, Jharkhand, Nagaland, Dadra & Nagar Haveli, Pondicherry, Punjab, Rajasthan, Tripura, Tamil Nadu, Uttar Pradesh, Uttarakhand, Arunachal Pradesh, Kerala	28
4.	125	Karnataka	01
5.	200	West Bengal	01

Marks allotted to Mother Tongue in the annual examination vary from 50 to 200. Jammu & Kashmir, Chhattisgarh and Lakshadweep have 50 marks. In Uttarakhand, 80 marks are allotted for written exam, 10 marks for project work and 10 marks for annual work/ session work. In Rajasthan, the marks are 100 but out of 100, 80 marks are kept for the annual examination and 20 marks for half yearly examination. The National Curriculum Framework 2005 recommended 100 marks for annual examination. The findings of the study are in conformity with national norms.

TEACHING OF ENGLISH

Numbers of class periods in a week for the teaching of English in Class VIII level are shown in Table 22.

Table 22: English: Periods per Week in Class VIII

S. No	Periods per Week	Name of the States/UTs	No. of the States/UTs (N=35)
1.	5	Bihar, Karnataka, Kerala, Nagaland, Jharkhand, Mizoram, Uttar Pradesh, Gujarat, Dadra & Nagar Haveli, Daman & Diu	10
2.	6	Chhattisgarh, West Bengal, Orissa, Madhya Pradesh, Pondicherry, Rajasthan, Tripura, Uttarakhand, Manipur, Andhra Pradesh	10
3.	7	Chandigarh, Lakshadweep, Maharashtra, Tamil Nadu	04
4.	8	A & N Islands, Assam, Meghalaya, Arunachal Pradesh, Sikkim, Haryana, Himachal Pradesh, Punjab, Delhi, Goa	10
5.	9	Jammu & Kashmir	01

Number of periods per week earmarked for teaching of English in Class VIII varies from 5 to 9 in different states. In almost one-third of the states (25.27%), the number of periods for teaching English in a week is 6. States like Chandigarh, Lakshadweep, Maharashtra and Tamil Nadu have provided 7 periods. In Jammu and Kashmir a maximum of 9 periods are allotted for the teaching of English per week.

DURATION OF ANNUAL EXAMINATION

The time allotted by different states/UTs for annual examination of English in Class VIII is given in Table 23.

Table 23: English: Time for Examination for Class VIII

S. No	Total Time for Examination	Name of the States/UTs	No of the States/UTs (N=35)
1.	2.00 Hours	Bihar, Kerala, Lakshadweep, Orissa, Jharkhand, Uttar Pradesh	06
2.	2.30 Hours	Andhra Pradesh, Chhattisgarh, Pondicherry, Rajasthan, Tamil Nadu, Uttarakhand, Karnataka, Jammu & Kashmir	08
3.	3.0 Hours	A & N Islands, Assam, Chandigarh, Daman & Diu, Goa, Gujarat, Himachal Pradesh, Haryana, Dadra & Nagar Haveli, Mizoram, Maharashtra, Delhi, Madhya Pradesh, Manipur, Sikkim, Meghalaya, Nagaland, Punjab, Tripura, Arunachal Pradesh	20
4.	5.40 Hours	West Bengal	01

Allotted time varies from state to state and ranges from two to five hours and forty minutes. Twenty states provide three hours, eight states two and half hours, six states only two hours and five hours and

40 minutes for the state of West Bengal. Mostly the duration of annual examination depends on the contents and syllabus prescribed for the subject by different states.

MARKS FOR EXAMINATION

Marks allotted in the annual examination are shown in Table 24.

Table 24: English: Maximum Marks in Annual Examination in Class VIII

S. No	Marks for Examination	Name of the States/UTs	No of the States/UTs (N=35)
1.	50	Chhattisgarh, Kerala, Jammu & Kashmir, Uttar Pradesh	04
2.	80	Goa, Manipur	02
3.	100	A&N Islands, Delhi, Andhra Pradesh, Assam, Bihar, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Gujarat, Tamil Nadu, Himachal Pradesh, Haryana, Karnataka, Sikkim, Mizoram, Madhya Pradesh, Meghalaya, Maharashtra, Nagaland, Orissa, Punjab, Tripura, Pondicherry, Rajasthan, Uttarakhand, West Bengal, Arunachal Pradesh, Lakshadweep, Jharkhand	29

Twenty nine states have provided 100 marks whereas the remaining six states have provided only 50 marks and 80 marks.

IMPLEMENTATION OF THREE LANGUAGE FORMULA

The status of implementation of three-language formula at Upper Primary Stage is presented in Table 25.

Table 25: Status of Implementation of Three-Language Formula

S. No	Response	Name of the States/UTs	No. of the States/UTs (N=35)
1.	Yes	Maharashtra, Sikkim, A&N Islands, Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Jharkhand, Karnataka, Chandigarh, Chhattisgarh, Daman & Diu, Goa, Gujarat, Dadra Nagar Haveli, Haryana, Himachal Pradesh, Jammu & Kashmir, Kerala, Lakshadweep, Manipur, Madhya Pradesh, Mizoram, Orissa, Uttarakhand, Rajasthan, Punjab, Pondicherry, Uttar Pradesh, Delhi, Meghalaya, Tripura, West Bengal	33
2.	No	Nagaland, Tamil Nadu	02

The three-language formula has been adopted in all the states and union territories except Nagaland and Tamil Nadu. In Tripura, three languages are implemented in Class VII and class VIII. Only two languages are taught in Nagaland and Tamil Nadu at upper primary stage.

TEACHING OF MATHEMATICS

Class periods allotted for teaching of Mathematics per week by different state/UTs per week at Class VIII stage are mentioned in Table 26.

Table 26: Mathematics: Periods per Week for Class VIII

S. No	Periods per Week	Name of the States/UTs	No of the States/UTs (N=35)
1.	5	Kerala, Meghalaya, Nagaland	03
2.	6	Bihar, Chhattisgarh, Karnataka, Lakshadweep, Manipur, Madhya Pradesh, Pondicherry, Assam, Rajasthan, Tripura, West Bengal, Jharkhand, Uttar Pradesh, Uttarakhand, Orissa	15
3.	7	Chandigarh, Gujarat, Maharashtra, Mizoram, Tamil Nadu, Dadra & Nagar Haveli, Daman & Diu, Goa	08
4.	8	A & N Islands, Andhra Pradesh, Arunachal Pradesh, Sikkim, Delhi, Haryana, Himachal Pradesh, Punjab	08
5.	9	Jammu & Kashmir	01

Five to nine periods per week are allotted for teaching of Mathematics. Jammu & Kashmir provides nine class hours per week whereas Kerala, Meghalaya and Nagaland have only five class hours per week for the subject. The Curriculum Framework 1975 recommended seven periods per week whereas 12 per cent time was allotted in the 1988 Curriculum Framework. The findings of the study are in conformity with the recommendations of NCFs.

DURATION OF ANNUAL EXAMINATION

Time allotted for annual examination for Mathematics in Class VIII is reflected in Table 27.

Table 27: Time for Mathematics in Annual Examination for Class VIII

S. No.	Total Time for Examination	Name of the States/UTs	No of the States/UTs (N=35)
1.	1.0 Hours	Orissa	01
2.	2.0 Hours	Bihar, Kerala, Lakshadweep, Goa	04
3.	2.30 Hours	Andhra Pradesh, Pondicherry, Rajasthan, Chhattisgarh, Jammu & Kashmir, West Bengal, Tamil Nadu, Uttarakhand	08
4.	3.0 Hours	A & N Islands, Assam, Delhi, Gujarat, Chandigarh, Daman & Diu, Haryana, Arunachal Pradesh, Karnataka, Uttar Pradesh, Meghalaya, Dadra & Nagar Haveli, Manipur, Madhya Pradesh, Sikkim, Tripura, Maharashtra, Punjab, Mizoram, Nagaland, Arunachal Pradesh, Himachal Pradesh	22

In more than sixty per cent states/UTs, three hours are allotted for annual examination of Class VIII students in Mathematics. Two hours and two and a half hours are allocated by four and eight states/UTs respectively.

MARKS FOR EXAMINATION

Marks allotted in the annual examination for Mathematics in Class VIII are given in Table 28.

Table 28: Marks Allotted for Mathematics in Class VIII

S. No	Maximum Marks for Examination	Name of the States/UTs	No of the States/UTs (N=35)
1.	50	Jammu & Kashmir, Kerala, Chhattisgarh, Orissa, Goa	05
2.	80	Manipur	01
3.	100	A&N Islands, Andhra Pradesh, Assam, Bihar, Chandigarh, Tamil Nadu, Daman & Diu, Gujarat, Himachal Pradesh, Haryana, Karnataka, Sikkim, Lakshadweep, Mizoram, Madhya Pradesh, Uttar Pradesh, Meghalaya, Maharashtra, Nagaland, Pondicherry, Punjab, Rajasthan, Tripura, Uttarakhand, Arunachal Pradesh, Jharkhand, Dadra & Nagar Haveli, Delhi	28
4.	200	West Bengal	01

In most of the states/UTs, 100 marks are allocated for annual examination whereas 50 marks are allotted in Jammu & Kashmir, Kerala, Goa, Orissa and Chhattisgarh. In Rajasthan 80 marks for annual and twenty per cent weight age is given for half yearly examination.

HEALTH AND PHYSICAL EDUCATION

In order to ascertain the status of health and physical education in the curriculum, it is important to know whether health and physical education is a compulsory or optional subject. The responses are classified in

Table 29.

Table 29: Status of Health and Physical Education at Upper Primary Stage

S. No	Status of Health & Physical Education	Name of the States/UTs	No of the States/UT (N=34)
1.	Compulsory	A&N Islands, Andhra Pradesh, Assam, Bihar, West Bengal, Daman & Diu, Maharashtra, Gujarat, Orissa, Chhattisgarh, Karnataka, Kerala, Lakshadweep, Nagaland, Sikkim, Pondicherry, Punjab, Rajasthan, Tripura, Uttar Pradesh, Tamil Nadu, Mizoram, Arunachal Pradesh, Uttarakhand, Dadra & Nagar Haveli, Manipur, Jharkhand, Meghalaya, Goa, Madhya Pradesh, Chandigarh	31
2.	Optional	Delhi, Haryana, Jammu & Kashmir	03

In almost all the states the subject of Health and Physical Education is compulsory. However, Delhi, Haryana and Jammu & Kashmir have this subject as an optional at upper primary stage.

STATUS OF EXAMINATION

Table 30 shows the states, which assess students' performance in Health and Physical Education.

Table 30: Examination for Physical & Health Education

S. No	Response	Name of the States/UTs	No of the States/UTs (N=34)
1.	Yes	A&N Islands, Assam, Bihar, Daman & Diu, Rajasthan, Gujarat, Chhattisgarh, Haryana, Tripura, Uttar Pradesh, Maharashtra, Nagaland, Punjab, Arunachal Pradesh, Mizoram, Meghalaya, West Bengal, Dadra & Nagar Haveli, Tamil Nadu, Karnataka, Uttarakhand	21
2.	No	Andhra Pradesh, Himachal Pradesh, Lakshadweep, Orissa, Madhya Pradesh, Sikkim, Pondicherry, Chandigarh, Goa, Jammu & Kashmir, Kerala, Manipur, Delhi	13

Health and Physical Education is an examination subject in 21 states/UTs.

PERIODS PER WEEK

Number of class periods allotted per week for teaching of Health and Physical Education in Class VIII are given in Table 31.

Table 31: Periods per Week for Class VIII

S. No	Period per Week	Name of the States/UTs	No of the States/UTs (N=31)
1.	1	Manipur, Orissa	02
2.	2	Andhra Pradesh, Delhi, Pondicherry, Goa, Kerala, Maharashtra, Mizoram, Sikkim, Tamil Nadu, Tripura, Haryana, Gujarat, Dadra & Nagar Haveli, West Bengal, Chandigarh, Daman & Diu, Madhya Pradesh	17
3.	3	Rajasthan, Manipur, Nagaland, Arunachal Pradesh, Uttar Pradesh, Punjab, Jammu and Kashmir	07
4.	4	Bihar, Karnataka, Himachal Pradesh	03
5.	5	Meghalaya, , Uttarakhand	02

Number of periods varies from 1 to 5. Almost forty per cent of the states have provided only 2 periods whereas about thirty per cent have assigned 3 periods.

Six periods per week were allocated in the 1975 Curriculum Framework whereas ten per cent time was allocated in the 1988 Framework.

TIME FOR ANNUAL EXAMINATION

The time allotted for annual examination is given in Table 32.

Table32: Time for Health and Physical Education in Annual Examination for Class VIII

S. No	Total Time for Examination	Name of the States/UTs	No of the States/UTs (N=12)
1.	1.0 Hours	Arunachal Pradesh	01
2.	2.0 Hours	Bihar, Punjab, Uttar Pradesh, Uttarakhand, Sikkim, Karnataka	06
3.	2.30 Hours	Rajasthan	01
4.	3.0 Hours	Meghalaya, Daman & Diu, Gujarat, Dadra & Nagar Haveli	04

Three hours are allotted for annual examination in Meghalaya, Daman & Diu, Gujarat and Dadra & Nagar Haveli states, two hours in Bihar, Punjab, Uttar Pradesh, Uttarakhand, Karnataka and Sikkim, and one hour in Arunachal Pradesh.

STATUS OF ART EXAMINATION

The status of Art Education is presented in Table 33.

Table 33: Status of Art Education at Upper Primary Stage

S. No	Status of Art Education	Name of the States/UTs	No of the States/UTs (N=34)
1.	Compulsory	A & N Islands, Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Daman & Diu, Haryana, Karnataka, Kerala, Maharashtra, Lakshadweep, Mizoram, Nagaland, Orissa, Pondicherry, Punjab, Rajasthan, West Bengal, Tripura, Tamil Nadu, Uttarakhand, Sikkim, Jharkhand, Meghalaya, Delhi, Gujarat, Dadra & Nagar Haveli, Chhattisgarh, Madhya Pradesh	29
2.	Optional	Chandigarh, Himachal Pradesh, Uttar Pradesh, Jammu & Kashmir, Goa	05

Art Education is compulsory in 29 states/UTs whereas it is an optional subject in the remaining 5 States/UTs. In Manipur, it is yet to be introduced. In Kashmir, art education is optional. In Tripura, Art Education is designated as Creative Education. In Chandigarh, Art Education is named as Drawing.

STATUS OF EXAMINATION

The status of examination of Art Education is given in Table 34.

Table 34: Art Education: Status of Examination

S. No	Response	Name of the States/UTs	No of the States/UTs (N=34)
1.	Yes	A&N Islands, Assam, Bihar, Daman& Diu, Delhi, Gujarat, Haryana, Karnataka, Orissa, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, West Bengal, Arunachal Pradesh, Sikkim, Maharashtra, Jharkhand, Dadra & Nagar Haveli, Tripura, Chhattisgarh, Madhya Pradesh, Chandigarh	23
2.	No	Andhra Pradesh, Goa, Tamil Nadu, Himachal Pradesh, Lakshadweep, Mizoram, Nagaland, Pondicherry, Meghalaya, Manipur, Kerala	11

Art Education is an examination subject in twenty three states, and in West Bengal Work education is taught instead of Art Education.

PERIODS PER WEEK

The picture regarding periods allotted per week to teaching of Art Education in Class VIII is given in Table 35.

Table 35: Periods per Week for Art Education in Class VIII

S. No	Period per Week	Name of the States/UTs	No of the States/UTs (N=27)
1.	1	Meghalaya, Tripura, Sikkim, West Bengal, Manipur, Tamil Nadu, Orissa	07
2.	2	Andhra Pradesh, Assam, Gujarat, Maharashtra, Dadra & Nagar Haveli, Kerala, Daman & Diu, Madhya Pradesh	08
3.	3	Delhi, Karnataka, Nagaland, Punjab, Arunachal Pradesh, Rajasthan, Uttar Pradesh, Uttarakhand	08
4.	4	Bihar, Chandigarh	02
5.	5	Haryana	01
6.	6	Himachal Pradesh	01

One or two periods are allotted to Art Education in one-third of the states whereas six periods are allotted in Himachal Pradesh.

Four periods were recommended in the 1975 School Curriculum Framework whereas 10 per cent time was recommended in 1988 Framework. The NCFSE recommended 2-4 periods per week for this subject.

WORK EDUCATION

The nomenclature of work education is given in Table 36.

Table 36: Nomenclature of Work Education at Upper Primary Stage

S. No	Nomenclature	Name of the States/UTs	No of the States/UTs (N=32)
1.	Socially Useful Productive Work (SUPW)	A&N Islands, Andhra Pradesh, Delhi, Karnataka, Madhya Pradesh, Punjab, Arunachal Pradesh, Sikkim, Meghalaya, West Bengal, Haryana, Uttar Pradesh	12
2.	Work Experience (WE)	Assam, Goa, Kerala, Lakshadweep, Mizoram, Nagaland, Pondicherry, Rajasthan, Tripura, Bihar, Manipur, Uttarakhand, Chandigarh, Jammu and Kashmir	14
3.	Craft (Life Oriented Education)	Tamil Nadu	01
4.	Work Education	Orissa, Gujarat, Dadra & Nagar Haveli, Daman & Diu, Chattisgarh	05

Work Education is named as Work Experience in 14 states (43.75%) whereas in another 11 states, it is titled as Socially Useful Productive Work. In Tamil Nadu, it is called Life Oriented Education. The School Curriculum Framework (1975, 1988) recommended the nomenclature as Work Experience whereas the NCFSE (2000) titled it as Work Education. Work as a pedagogy for every curricular area has been recommended in NCF (2005). The states generally use the nomenclature recommended by National Curriculum Frameworks.

STATUS OF EXAMINATION

Is Work Education an Examination subject? The responses are given in Table 37.

Table 37: Status of Examination of Work Education

S. No	Response	Name of the States/UTs	No of the States/UTs (N=35)
1.	Yes	Assam, Arunachal Pradesh, Bihar, Nagaland, Chhattisgarh, Daman & Diu, West Bengal, Gujarat, Madhya Pradesh, Punjab, Tripura, Uttar Pradesh, Sikkim, Rajasthan, Dadra & Nagar Haveli, Jharkhand, Goa	17
2.	No	A& N Islands, Himachal Pradesh, Karnataka, Lakshadweep, Meghalaya, Maharashtra, Pondicherry, Tamil Nadu, Uttarakhand, Mizoram, Delhi, Haryana, Jammu & Kashmir, Manipur, Chandigarh, Orissa, Andhra Pradesh, Kerala	18

Findings indicate that Work Education is an examination subject in seventeen states. In Uttarakhand, separate examination is conducted for work education; it is included in each subject as project work. Project work is of 10 marks in each subject.

PERIODS PER WEEK

Number of periods per week assigned to Work Education and the timetable for Class VIII is given in Table 38.

Table 38: Periods per Week for Class VIII

S. No	Periods Per Week	Name of the States/UTs	No of the States/UTs (N=28)
1.	1	Meghalaya, Tripura, Gujarat, Dadra & Nagar Haveli, Jammu & Kashmir, West Bengal, Manipur, Tamil Nadu, Daman & Diu, Orissa	10
2.	2	Delhi, Maharashtra, Mizoram, Pondicherry, Sikkim, Kerala, Punjab, Chandigarh, Madhya Pradesh, Haryana	10
3.	3	Andhra Pradesh, Nagaland, Uttarakhand, Uttar Pradesh, Arunachal Pradesh	05
4.	4	Bihar, Karnataka, Rajasthan	03

Number of periods varies from one to four. In most of the states, one or two periods per week are allocated. Four periods were recommended in the 1975 Framework, whereas 12 per cent time was allocated in the 1988 Framework. The NCFSE (2000) recommended six periods per week.

MORAL AND VALUE EDUCATION

Moral and Value Education is taught at upper primary stage as a subject in Karnataka, Chandigarh, Maharashtra, Pondicherry, Sikkim, Andhra Pradesh, Haryana, Orissa, Meghalaya, Mizoram, Uttar Pradesh, Goa and Madhya Pradesh. Six periods per week are allotted in Maharashtra and Madhya Pradesh and three in Haryana. The annual examination is conducted in Haryana, Mizoram, Uttar Pradesh, Madhya Pradesh and Uttarakhand.

MECHANISM FOR CURRICULUM EVALUATION

The mechanism of evaluation adopted in different states is shown in Table 39.

Table 39: Mechanism for Evaluation of Curriculum at Upper Primary Stage

S. No	Mechanism for Evaluation	Name of the States/UTs	No of the States/UTs (N=33)
1.	Marking	Chhattisgarh, Daman & Diu, Lakshadweep, Mizoram, Nagaland, Pondicherry, Rajasthan, Tripura, Tamil Nadu, Sikkim, West Bengal, Goa, Punjab, Uttar Pradesh, Gujarat, Jammu & Kashmir, Dadra & Nagar Haveli, Manipur, Andhra Pradesh, Chandigarh	20
2.	Marking for scholastic and Grading for Co-scholastic Aspects	A & N Islands, Assam, Bihar, Delhi, Haryana, Karnataka, Orissa, Maharashtra, Meghalaya, Uttarakhand, Himachal Pradesh, Arunachal Pradesh	12
3.	Grading	Kerala	01

Marking is followed in twenty states States/UTs and in remaining twelve states both marking for scholastic and grading for co-curricular aspects are followed.

IMPLEMENTATION OF CONTINUOUS COMPREHENSIVE EVALUATION

The status of implementation of continuous comprehensive evaluation is presented in Table 40.

Table 40: Status of Implementation of Continuous Comprehensive Evaluation At Upper Primary Stage

S. No.	Response	Name of the States/UTs	No of the States/UTs (N=34)
1.	Yes	Andhra Pradesh, Arunachal Pradesh, Kerala, Karnataka, Madhya Pradesh, Punjab, Assam, Jammu & Kashmir, West Bengal, Delhi, Uttar Pradesh, Uttarakhand, Haryana, Tripura, Himachal Pradesh, Manipur	16
2.	No	Maharashtra, Sikkim, Nagaland, Bihar, Jharkhand, Daman & Diu, Gujarat, Dadra & Nagar Haveli, Mizoram, Orissa, Tamil Nadu, Rajasthan, Pondicherry, Meghalaya, A&N Islands, Lakshadweep, Chhattisgarh, Chandigarh	18

The continuous and comprehensive evaluation is implemented in only sixteen states. In Haryana, CCE was introduced in 2006.

SUGGESTIONS FOR IMPROVING SCHOOL CURRICULUM AT UPPER PRIMARY STAGE

The following suggestions were provided by states for improvement in school curriculum:

- The syllabus of social studies to be reduced (*West Bengal, Arunachal Pradesh and Maharashtra*)
- Outdated information should be deleted for reducing the curriculum load. (*Maharashtra, West Bengal, Haryana, Arunachal Pradesh, Andhra Pradesh, Himachal Pradesh*)
- Stress should be minimized by providing activities through arts, work education, health and physical education. (*Gujarat, Delhi, Uttarakhand, Madhya Pradesh, Kerala*)
- The needs of coastal, hilly, tribal, regional areas are to be focused in school curriculum. (*West Bengal, Rajasthan, Maharashtra*)
- Local specific examples to be included in history, geography, science and mathematics subjects. (*J&K, Manipur, Mizoram, M.P., U.P., Uttarakhand, Sikkim, Rajasthan, Pondicherry, Nagaland*)
- The examples on morals and values set by Educationists, Thinkers and Philosophers to be incorporated in curriculum. (*Uttar Pradesh*)
- Feedback and remedial work should be strengthened. Weightage to be given out of classroom activities. (*West Bengal, Goa, Andhra Pradesh*).
- Emerging issues and concerns like globalization, privatization and liberalization to be included. (*West Bengal, Uttarakhand, Bihar*)
- The competency and content enrichment to be provided to teachers through in-service education programmes. (*Punjab, Chhattisgarh, Delhi*)
- Curriculum should be framed in such a way that CCE (Continuous Comprehensive Evaluation) and grading system can be introduced (*Chandigarh*)
- Play way/Games/Role play/Puppetry/ performing Art should be introduced. If possible figures/ diagrams must be localized state wise. (*Jammu & Kashmir*)

- Illustrations and examples should be included in the curriculum and capacity building programme for school teachers to be organized on regular basis. (*Uttar Pradesh*)
- Regular and intensive training programme for elementary school teachers should be organized in the area of teaching methodology, evaluation techniques and classroom teaching. Modules for in-service training programmes should be developed according to the needs of the teachers. (*Himachal Pradesh*)

* * * *

Chapter 4

Status of School Curriculum: Secondary Stage

This section presents the findings related to secondary stage of school education in different states.

STRUCTURE AT SECONDARY STAGE

The classes covered under the secondary stage in different states are shown in Table 1.

Table 1: Structure of Secondary Stage

S. No.	Structure of Secondary Stage	Name of the States/UTs	No. of the States/UTs (N=35)
1.	(VIII-X)	Andhra Pradesh, Goa, Karnataka, Kerala, Lakshadweep, Mizoram, Meghalaya	07
2.	(IX - X)	A&N Islands, Arunachal Pradesh, Chandigarh, Bihar, Chhattisgarh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Maharashtra, Madhya Pradesh, Manipur, Nagaland, Pondicherry, Rajasthan, Sikkim, Tripura, Tamil Nadu, Uttarakhand, West Bengal, Uttar Pradesh, Jharkhand, Gujarat, Dadra & Nagar Haveli, Assam, Daman & Diu, Orissa, Punjab	28

The classes included under the secondary stage in seven states are VIII to X, whereas in the 28 states, classes IX and X are included under this stage.

AGENCY FOR CURRICULUM CONSTRUCTION

Agencies responsible for curriculum, Syllabus and textbook development in different states are given in Table 2.

Table 2: Agency for Curriculum Construction

S. No.	Institution	Name of the States/UTs	No. of the States/UTs (N=34)
1	NCERT	Andaman Islands, Haryana, Mizoram, Sikkim, Arunachal Pradesh, Chandigarh, Delhi, Himachal Pradesh, Jharkhand	09
2	SCERTs, SIEs	Andhra Pradesh, Bihar, Karnataka, Kerala, Meghalaya (MBCSE), Tripura (TBSE), Tamil Nadu, Orissa (IT)	08
3	Board of School Education, Board of Secondary Education	Assam, Goa, Madhya Pradesh, Nagaland, Rajasthan, Uttarakhand, West Bengal, Daman & Diu, Maharashtra, Gujarat, Dadra & Nagar Haveli, Jammu & Kashmir, Punjab, Manipur, Uttar Pradesh, Chhattisgarh	16
4	Textbook Board	Pondicherry	01

Nine states follow the curriculum, syllabus and textbooks developed by the NCERT. The SCERTs/SIEs, Boards of School Education and Textbook board are other agencies responsible for curriculum and textbooks construction in twenty-five states. In Madhya Pradesh, SCERTs, Boards of School Education and Textbook Corporation Madhya Pradesh are responsible for curriculum and textbooks construction. However, in Meghalaya SCERT & Board of School Education are responsible for the secondary stage curriculum and textbooks.

NUMBER OF WORKING DAYS

Table 3 presents the classified responses indicating number of working days schools function in a year at the secondary stage in different states.

Table 3: Number of Working Days in a Year at Secondary Stage

S. No.	Working Days	Name of the States/UTs	No. of the States/UTs (N=35)
1.	250-260	Bihar (253), Jharkhand (253), Assam (259)	03
2.	240-250	Madhya Pradesh (245), Gujarat (247), Himachal Pradesh (248), Dadra & Nagar Haveli (247), Punjab (242), Chandigarh (245), Daman & Diu (247)	07
3.	230-240	West Bengal (236), Maharashtra (237), Orissa (234)	03
4.	220-230	Sikkim (230), Chhattisgarh (230), Tamil Nadu (220)	03

5	210-220	A&N Islands (210-220), Andhra Pradesh (220), Goa (220), Haryana (220), Karnataka (220), Lakshadweep (220), Uttarakhand (220), Uttar Pradesh (220), Arunachal Pradesh (220), Tripura (220), Meghalaya (220), Jammu and Kashmir (220), Rajasthan (220), Kerala (210)	14
6	200-210	Delhi (210), Mizoram (210), Nagaland (210)	03
7	190-200	Pondicherry (200)	01
8	160	Mamipur	01

School working days in a year range from 160 to 250-260 days. In 14 states (40%) working days range from 210-220 as reported by the respective departments in the states. Exact number of days reported by the respective states is mentioned under brackets after each state in Table 3. The School Curriculum Framework (1975) recommended minimum 240 working days out of which 220 for instruction and 20 days for school camps and community services. 200 working days were recommended in 1988 and 2005 Curriculum Framework. NCSE (2000) recommended minimum 180 working days for effective instruction. No doubt, there are variations in different states in terms of school working days but, most of the states are following recommended norms of NCFs. Even forward states like Tamil Nadu, Pondicherry and Kerala have 200 working days. But these states have favorable conditions for teaching learning process. The schools are having adequate physical infrastructure, facilities and trained teachers.

SCHOOL WORKING HOURS IN A DAY

School working hours in a day in different states are presented in Table 4.

Table 4: School Hours in a Day at Secondary Stage

S. No	Total Duration of a School Hours	Name of the States/UTs	No. of the States/UTs (No=35)
1.	6.30 Hours	Arunachal Pradesh, Jharkhand	02
2	6.00 Hours	A&N Islands, Bihar, Chandigarh, Haryana, Himachal Pradesh, Jammu & Kashmir, Kerala, Karnataka, Orissa, Punjab, Rajasthan, Sikkim, Meghalaya, Uttar Pradesh, Gujarat, Dadra & Nagar Haveli, Maharashtra, Delhi, Daman & Diu, Andhra Pradesh	20
3.	5.45 Hours	Nagaland, Pondicherry	02
4.	5.40 Hours	Tamil Nadu	01
5.	5.30 Hours	Assam, Lakshadweep, Mizoram, West Bengal	04

6.	5.25 Hours	Tripura	01
7.	5.20 Hours	Uttarakhand	01
8.	5.15 Hours	Manipur	01
9.	5.00 Hours	Madhya Pradesh, Chhattisgarh, Goa	03

School hours in a day vary from 5 hours to 6 hours 30 minutes. Twenty out of 35 states have 6 hours every school day. States like Madhya Pradesh, Chhattisgarh and Goa have a 5-hour school day. In Uttarakhand, total duration of school day is 5.20 hours during summer and 6.20 hours during winter. All four school Curriculum Frameworks (1975, 1988, 2000 and 2005) recommended six school hours per day out of which five hours for instruction and one hour for morning assembly, recess and other routine activities. The majority of the states are following the recommendations of NCFs but, in states like Andhra Pradesh, the school hours are longer, it may be due to more number of recess periods.

NUMBER OF PERIODS PER WEEK

The total number of periods allotted per week for teaching of different subjects is given in Table 5.

Table 5: Number of Class Periods in a Week at Secondary Stage in Class X

S. No.	Total No of Periods per Week	Name of the States/UTs	No. of the States/UTs (N=35)
1.	34	Chhattisgarh	01
2.	35	<u>Kerala</u> , Nagaland, <u>Pondicherry</u> , Mizoram	04
3.	36	Jammu and Kashmir	01
4.	39	Tripura	01
5.	40	<u>Karnataka</u> , Meghalaya, <u>Tamil Nadu</u>	03
6.	42	Orissa	01
7.	43	Assam	01
8.	44	<u>West Bengal</u>	01
9.	45	Bihar, Jharkhand, Gujarat, Delhi, Dadra & Nagar Haveli, Daman & Diu	06

10.	47	Manipur	01
11.	48	A & N Islands, Andhra Pradesh, Chandigarh, Goa, Rajasthan, Uttar Pradesh, Uttarakhand, Lakshadweep, Sikkim , Punjab, Madhya Pradesh	11
12.	50	Maharashtra	01
13.	52	Himachal Pradesh	01
14.	54	Arunachal Pradesh, Haryana	02

Number of class periods per week varies from 34 in Chhattisgarh to 54 in Arunachal Pradesh and Haryana. In Madhya Pradesh, total no. of periods allotted is 36 from 12:00 to 5:00 hours and 48 periods from 10:00 to 5:00 hours. A little over one-third of the states have 48 class periods in a working week. The School Curriculum Framework (1975) recommended 48 periods per week for teaching different subjects.

DURATION OF A PERIOD

Time duration per period at secondary stage is given in the Table 6.

Table 6: Duration of a Class Period at Secondary Stage

Sr. No.	Duration of Period in Minutes	Name of the States/UTs	No. of the States/UTs (N=35)
1.	45 Minutes	Kerala, Manipur, Nagaland, Pondicherry, Tamil Nadu, Mizoram, Jammu and Kashmir, Bihar, Karnataka, Meghalaya	10
2.	40 Minutes	A&N Islands, Arunachal Pradesh, Lakshadweep, Orissa, Uttar Pradesh, Punjab, Rajasthan, Tripura, Sikkim, West Bengal, Assam, Chandigarh, Jharkhand, Delhi, Uttarakhand, Madhya Pradesh, Andhra Pradesh	17
3.	35 Minutes	Daman & Diu, Goa, Himachal Pradesh, Maharashtra, Haryana, Gujarat, Dadra & Nagar Haveli, Chhattisgarh	08

Duration of a class period ranges from 35 minutes in Daman & Diu, Goa, Himachal Pradesh, Maharashtra, Haryana, Gujarat, Chhattisgarh and Dadra & Nagar Haveli to 45 minutes in states like Andhra Pradesh, Kerala, Manipur, Nagaland, Karnataka, Meghalaya, Pondicherry, Tamil Nadu,

Mizoram, Jammu and Kashmir and Bihar. More than fifty per cent of the total states have a 40 minute class period. West Bengal has 40 minutes for 4 periods and 35 minutes for other 4 periods. Around 40 minute class period was recommended in all four Curriculum Frameworks. This recommendation has been implemented in all the States and Union Territories.

NUMBER OF RECESS PERIODS

Number of recess periods allotted in a school day are given in Table 7.

Table 7: No. of Recess Periods at Secondary Stage

Sr. No.	No. of Recess Periods per day	Name of the States/UTs	No. of the States/UTs (N=35)
1.	1	A&N Islands, Assam, Arunachal Pradesh, Bihar, Chandigarh, Delhi, Goa, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Meghalaya, Manipur, Nagaland, Pondicherry, Punjab, Rajasthan, Tripura, Uttar Pradesh, Uttarakhand, West Bengal, Jharkhand, Orissa	24
	2	Lakshadweep, Tamil Nadu, Sikkim, Mizoram, Chhattisgarh	05
	3	Andhra Pradesh, Gujarat, Kerala, Dadra & Nagar Haveli, Maharashtra, Daman & Diu	06

In twenty four states one recess is provided while two recesses are given in five states and three recesses in a school day are observed in six states. No doubt, more than one recess helps the children make them ready again for teaching learning process but it increases the school hours.

DURATION OF RECESS PERIODS

Time allotted for recess periods is mentioned in Table 8.

Table 8: Duration of Recess Periods at Secondary Stage

Sr. No.	Duration of Recess Period	Name of the States/UTs	No. of the States/UTs (N=35)
1.	80 Minutes	Kerala	01
2.	70 Minutes	Andhra Pradesh	01
3.	60 Minutes	Maharashtra	01
4.	50 Minutes	Mizoram, Sikkim, Gujarat, Dadra & Nagar Haveli, Daman & Diu	05
5.	45 Minutes	Manipur, Jammu and Kashmir, Karnataka	03

6.	40 Minutes	A&N Islands, Orissa, Arunachal Pradesh, Chhattisgarh	04
7.	35 Minutes	Punjab	01
8.	30 Minutes	Assam, Bihar, Himachal Pradesh, Madhya Pradesh, Meghalaya, Nagaland, Rajasthan, Tripura, Uttar Pradesh, Uttarakhand, Jharkhand, West Bengal	12
9.	20 Minutes	Chandigarh, Delhi, Tamil Nadu, Lakshadweep, Haryana	05
10.	15 Minutes	Pondicherry, Goa	02

Total time allotted to recess during the school day ranges from 15 minutes in Pondicherry and Goa to 80 minutes in Kerala. In the case of states which have only one recess period the time varies from 15 minute to 50 minutes.

Two or more recess periods are provided in the following states:

Andhra Pradesh (10M+75M+10M)

Gujarat (10M+30M+10M)

Kerala (10M+60M+10M)

Dadra & Nagar Haveli (10M+30M+10M)

Chhattisgarh (10M+30M)

Daman & Diu (10M+10M)

Lakshadweep (10M+10M)

Maharashtra (30M+10M)

Orissa (10M+30M)

Tamil Nadu (10M+10M)

Sikkim (15M+35M)

It appears from the above that there is a lot of variation in time allocation for recess breaks in different states. It may be due to their social and geographical conditions. But, large number of breaks and also more time allotted for recess breaks increase the school hours which sometimes creates disinterest and fatigue among children.

TEACHING OF SCIENCE

The existing nomenclature of Science in different States/UTs is given in Table 9.

Table 9: Nomenclature of Science Subject at Secondary Stage

S. No.	Nomenclature of Science	Name of the States/UTs	No. of the States/UTs (N=35)
1.	General Science	A&N Islands, Assam, Arunachal Pradesh, Jharkhand, Punjab, Tamil Nadu, Chandigarh, Chhattisgarh, Manipur	09
2.	Science	Uttarakhand, Nagaland, Karnataka, Pondicherry, Sikkim, Rajasthan, Delhi, Mizoram, Haryana, Jammu & Kashmir, Bihar, Goa	12
3.	Science & Technology	Meghalaya, Maharashtra, Gujarat, Dadra & Nagar Haveli, Daman & Diu	05
4.	Physics Chemistry and Biology	Madhya Pradesh, Himachal Pradesh, Lakshadweep, Tripura	04
5.	Physical Science & Life Science	West Bengal	01
6.	Physical Science and Biological Science	Orissa, Andhra Pradesh, Kerala, Uttar Pradesh	04

The nomenclature of Science is General Science in nine states, Science in twelve states Physics, Chemistry and Biology in four states and Science & Technology in Meghalaya, Gujarat, Dadra & Nagar Haveli, Daman & Diu and Maharashtra. In Delhi, the nomenclature of Science is Natural science. In West Bengal, Physics and Chemistry are included in Physical Science and Biology is known as life Science. In Uttar Pradesh nomenclature of science is Physical and Biological sciences. In Chandigarh, nomenclature of science is Physics and Chemistry, Physical and Biological Sciences. The School Curriculum Framework (1975, 1988 and 2005) recommended the nomenclature as Science, whereas the NCFSE (2000) named it as Science and Technology.

APPROACHES FOR TEACHING OF SCIENCE

Different approaches followed by states/UTs for teaching of Science at secondary stage are mentioned in Table 10.

Table 10: Approaches for Teaching Science at Secondary Stage

<i>S. No.</i>	<i>Approach</i>	<i>Name of the States/UTs</i>	<i>No. of the States/UTs (N=35)</i>
1.	Integrated approach	Chhattisgarh, Gujarat, Jammu and Kashmir, Arunachal Pradesh, Nagaland, Tamil Nadu, Uttarakhand, Sikkim, Dadra & Nagar Haveli, Jharkhand, Maharashtra, Mizoram, Himachal Pradesh, Kerala, Manipur, Daman & Diu, Punjab	17
2.	Disciplinary approach	Andhra Pradesh, Bihar, Goa, Haryana, Lakshadweep, Orissa, Tripura, Rajasthan, West Bengal, A&N Islands, Assam, Meghalaya, Karnataka, Madhya Pradesh, Pondicherry, Delhi, Chandigarh	17
3.	Both integrated & Disciplinary approaches	Uttar Pradesh	01

The disciplinary approach is followed in seventeen states/UTs and integrated approach is also followed in an equal number of states. The School Curriculum Framework (1975, 1988 and 2000) recommended disciplinary approach for teaching of science whereas the NCFSE (2000) recommended Integrated Approach.

PERIODS PER WEEK FOR TEACHING SCIENCE

Table 11 provides information about the number of class periods in a week allotted to teaching of science in different states.

Table 11: Periods Allotted Per Week to Teaching of Science at Secondary Stage

<i>Sr. No.</i>	<i>Periods per Week</i>	<i>Name of the States/UTs</i>	<i>No. of the States/UTs (N=35)</i>
1.	5	Nagaland, Meghalaya	02
2.	6	Bihar, Chhattisgarh, Kerala, Karnataka, Madhya Pradesh, Sikkim, Assam, Pondicherry, Jharkhand, Himachal Pradesh, West Bengal	11
3.	7	Tamil Nadu, Mizoram, Gujarat, Dadra & Nagar Haveli, Daman & Diu, Haryana	06
4.	8	A&N Islands, Andhra Pradesh, Maharashtra, Orissa, Rajasthan, Tripura, Uttar Pradesh, Jammu & Kashmir, Punjab, Manipur, Goa	11
5.	9	Chandigarh, Lakshadweep, Arunachal Pradesh, Uttarakhand, Delhi	05

Five to nine periods per week are devoted to the teaching of science. Nine periods are allotted in Chandigarh, Delhi, Lakshadweep, Uttarakhand and Arunachal Pradesh states. In Madhya Pradesh, 6 periods are allotted for teaching of science at secondary stage and 2 hours of practical per day. Five periods are allotted in Nagaland and Meghalaya for teaching of science.

The School Curriculum Framework (1975) recommended seven periods whereas 13 per cent time was allocated in 1988 framework. NCFSE (2000) recommended 240 periods in total, 180 periods for theory and 60 periods for practical in a year.

DURATION OF ANNUAL EXAMINATION

Time allotted for annual examination for Science in different states at secondary stage is shown in Table 12.

Table 12: Duration of Time for Annual Examination in Science Subject

S. No.	Maximum Time for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	2.30 hours	Andhra Pradesh, Pondicherry, Lakshadweep, Tamil Nadu, Maharashtra, Bihar, Orissa	07
2.	3.0 hours	A&N Islands, Assam, Sikkim, Chandigarh, Delhi, Daman & Diu, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Meghalaya, Madhya Pradesh, Mizoram, Nagaland, Punjab, Arunachal Pradesh, Uttar Pradesh, Manipur, Dadra & Nagar Haveli, Goa, Chhattisgarh, Uttarakhand, Rajasthan	24
3.	4.30 hours	Kerala	01
4.	5.0 hours	Jharkhand	01
5.	5.40 hours	West Bengal	01
6.	6.0 hours	Tripura	01

The time allotted for examination of science is three hours in 24 states/UTs, whereas it is two and a half hours in Andhra Pradesh, Pondicherry, Lakshadweep, Tamil Nadu, Bihar, Orissa and Maharashtra. Five hours for two papers are given in Jharkhand. In Tripura 3 hours each for two papers of science are allotted for the annual examination.

MARKS FOR ANNUAL EXAMINATION

Total marks allotted for Science subject in the annual examination are shown in Table 13.

Table 13: Marks Allotted for Examination in Science

<i>Sr. No.</i>	<i>Total Marks for Examination</i>	<i>Name of the States/UTs</i>	<i>No. of the States/UTs (N=35)</i>
1.	200	West Bengal, Tripura	02
2.	150	Jharkhand	01
3.	120	Kerala	01
4.	100	A&N Islands, Andhra Pradesh, Assam, Chandigarh, Chhattisgarh, Daman & Diu, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Meghalaya, Madhya Pradesh, Mizoram, Dadra & Nagar Haveli, Lakshadweep, Nagaland, Pondicherry, Punjab, Rajasthan, Tamil Nadu, Arunachal Pradesh, Sikkim, Uttarakhand, Uttar Pradesh, Karnataka, Maharashtra, Bihar, Orissa	28
5.	80	Goa, Delhi, Manipur	03

In most of the states/UTs, total marks allotted are 100 but in Goa, Manipur and Delhi 80 marks for papers are allotted. In Jharkhand, it is 150 marks for two papers, 75 marks for each paper. In West Bengal, 100 marks are allotted for physical science and 100 marks for life science. In Manipur, 20 marks from CCE are provided. Generally, maximum marks allotted for annual examination depend upon the content prescribed for science.

TEACHING OF SOCIAL SCIENCES

The nomenclature followed in different states/UTs for Social Sciences at secondary stage is given in Table 14.

Table 14: Nomenclature of Social Sciences at Secondary Stage

Sr. No.	Nomenclature	Name of the States/UTs	No. of the States/UTs (N=35)
1.	Social Studies	Andhra Pradesh, Meghalaya, Himachal Pradesh	03
2.	Social Sciences	A&N Islands, Delhi, Goa, Jammu & Kashmir, Nagaland, Rajasthan, Uttarakhand, Tamil Nadu, Bihar, Uttar Pradesh, Maharashtra, Jharkhand, Manipur, Mizoram, Punjab, Gujarat, Delhi, Dadra & Nagar Haveli, Kerala, Assam, Daman & Diu, Orissa, Chhattisgarh, Karnataka	23
3.	History, Geography, Civics and Economics	Chandigarh, Haryana, Lakshadweep, Madhya Pradesh, Sikkim, Pondicherry, Arunachal Pradesh	07
4.	History, Geography	Tripura, West Bengal	02

In twenty-three states/UTs, it is named as Social Sciences whereas in three states/UTs, it is called Social Studies. In West Bengal and Tripura the nomenclature is History and Geography instead of Social Sciences.

APPROACHES TO TEACHING OF SOCIAL SCIENCES

The approaches followed by different states/UTs for teaching of Social Sciences are given in Table 15.

Table 15: Approaches to Teaching Social Sciences at Secondary Stage

Sr. No.	Approach	Name of the States/UTs	No. of the States/UTs (N=35)
1.	Integrated Approach	Gujarat, Jammu & Kashmir, Nagaland, Arunachal Pradesh, Uttarakhand, Punjab, Pondicherry, Tamil Nadu, Dadra & Nagar Haveli, Mizoram, Kerala, Daman & Diu, Himachal Pradesh, Chattisgarh	14
2.	Disciplinary Approach	Sikkim, Goa, Madhya Pradesh, Orissa, West Bengal, Rajasthan, Tripura, Mizoram, Bihar, Lakshadweep, Maharashtra, Assam, Chandigarh, Karnataka, A & N Islands, Jharkhand, Haryana, Meghalaya, Delhi, Andhra Pradesh	20
3.	Both approaches	Manipur, Uttar Pradesh	02

In fourteen states/UTs, integrated approach is followed whereas in twenty States/UTs disciplinary approach is followed. Both the approaches are followed in the state of Uttar Pradesh and Manipur.

In School Curriculum Framework (1975, 1988, 2005) the disciplinary approach was recommended, whereas integrated approach was recommended in NCFSE (2000).

PERIODS PER WEEK

Numbers of periods allotted per week for teaching of social sciences in Class X are given in Table 16.

Table 16: Periods Allotted Per Week for Teaching of Social Sciences

Sr. No.	Periods per Week	Name of the States/UTs	No. of the States/UTs (N=35)
1.	5	Bihar, Nagaland, Pondicherry, Jharkhand, Punjab	05
2.	6	Andhra Pradesh, Chhattisgarh, Haryana, Jammu & Kashmir, Lakshadweep, Madhya Pradesh, Maharashtra, Uttar Pradesh, Karnataka, Sikkim, Assam, Mizoram, Himachal Pradesh, West Bengal, Kerala, Tamil Nadu	16
3.	7	Goa, Gujarat, Dadra & Nagar Haveli, Manipur, Daman & Diu	05
4.	8	A&N Islands, Orissa, Rajasthan, Meghalaya, Tripura	05
5.	9	Chandigarh, Arunachal Pradesh, Uttarakhand, Delhi	04

Five periods are allotted per week for teaching of Social Sciences in five states, whereas nine periods are allotted in Chandigarh, Uttarakhand, Delhi and Arunachal Pradesh. Six periods per week for teaching of social sciences subject are allotted by sixteen states/Union Territories.

The School Curriculum Framework (1975) recommended seven periods per week, whereas 13 per cent time was allocated in 1988 curriculum framework. The NCFSE (2000) recommended 210 periods per week. The above findings are in conformity with recommendations of NCFs. But, the number of periods allotted to teaching of social science depends upon the contents and syllabus prescribed for social science.

DURATION OF ANNUAL EXAMINATION

The time allotted for annual examination for social sciences in Class X is given in Table 17.

Table 17: Duration of Examination for Social Sciences

S. No.	Maximum Time for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	2.30 hours	Andhra Pradesh, Pondicherry, Tamil Nadu, Kerala, Orissa	05
2.	3.0 hours	A&N Islands, Assam, Manipur, Dadra & Nagar Haveli, Chandigarh, Daman & Diu, Delhi, Gujarat, Himachal Pradesh, Haryana, Jammu & Kashmir, Karnataka, Mizoram, Madhya Pradesh, Meghalaya, Nagaland, Punjab, Uttar Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim, Chhattisgarh, Bihar, Rajasthan	24
3.	4.0 hours	Lakshadweep, Goa	02
4.	5.0 hours	Maharashtra	01
5.	6.0 hours	Tripura, West Bengal, Jharkhand	03

In most of the states/UTs, three hours for annual examination of social sciences have been allotted whereas two and half hours are allotted in Andhra Pradesh, Pondicherry, Kerala, Orissa and Tamil Nadu. Two hours each for two papers of social sciences are allotted in Lakshadweep. Three hours each for two papers are allotted in West Bengal, Jharkhand and Tripura. Two and half hours each for two papers are allotted in Orissa. In Tripura, 3 hours each for two papers of Social science are allotted.

MARKS FOR ANNUAL EXAMINATION

Table 18 shows the picture of allocation of marks in the annual examination.

Table 18: Marks Allotted for Social Sciences

S. No.	Total Marks Allotted for the Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	200	West Bengal, Tripura	02
2.	150	Jharkhand	01
3.	100	A&N Islands, Andhra Pradesh, Assam, Chandigarh, Dadra & Nagar Haveli, Chhattisgarh, Daman & Diu, Gujarat, Himachal Pradesh, Haryana, Lakshadweep, Jammu and Kashmir, Karnataka, Mizoram, Madhya Pradesh, Meghalaya, Nagaland, Pondicherry, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim, Maharashtra, Goa, Bihar, Orissa	29
4.	80	Delhi, Kerala, Manipur	03

In most of the states/UTs 100 marks are allotted whereas in Jharkhand 150 marks are allotted to two papers.

TEACHING OF MOTHER TONGUE

Periods allotted per week to teaching of mother tongue in Class X are given in Table 19.

Table 19: Periods Allotted to Teaching of Mother Tongue per Week for Class X

Sr. No.	Period per Week	Name of the States/UTs	No. of the States/UTs (N=35)
1.	4	Lakshadweep, Mizoram	02
2.	5	Nagaland, Bihar, Meghalaya, Goa	04
3.	6	Chandigarh, Chhattisgarh, Daman & Diu, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Pondicherry, Rajasthan, Uttarakhand, Arunachal Pradesh, Sikkim, Gujarat, Himachal Pradesh, Dadra & Nagar Haveli, Kerala, Punjab, Manipur, Orissa, Andhra Pradesh	20
4.	7	Tamil Nadu, Assam, Delhi	03

5.	8	A&N Islands, Tripura, Jharkhand, Haryana	04
6.	9	Uttar Pradesh, West Bengal	02

As many as twenty states/UTs have allotted six periods per week for teaching mother tongue. Four periods per week are allotted by Lakshadweep and Mizoram and nine periods per week by West Bengal and Uttar Pradesh, followed by eight periods in A&N Islands, Jharkhand, Haryana and Tripura states/UTs. In Arunachal Pradesh, English, being medium of instruction, is taught as first language, Hindi is taught as second language whereas no local dialect of any tribe is taught as mother tongue at secondary stage due to lack of textbooks etc. In Delhi, seven hours for language –I and six hours for language-II are earmarked.

The School Curriculum Framework (1975) recommended 6 periods per week while 30 per cent time was allocated to this subject by the 1988 curriculum framework. The findings are in conformity with the recommendations made in NCFs.

TIME FOR ANNUAL EXAMINATION

Time allotted by different states/UTs in the annual examination for mother tongue is shown in Table 20.

Table 20: Time Allotted to Examination of Mother Tongue Subject for Class X

S. No.	Maximum Time for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	2.0 hours	Lakshadweep, Jharkhand	02
2.	2.30 hours	Andhra Pradesh, Orissa, Tamil Nadu, Pondicherry	04
3.	3.0 hours	A&N Islands, Assam, Arunachal Pradesh, Chandigarh, Chhattisgarh, Delhi, Daman & Diu, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Meghalaya, Madhya Pradesh, Maharashtra, Mizoram, Nagaland, Punjab, Tripura, Uttar Pradesh, Sikkim, Dadra & Nagar Haveli, Uttarakhand, Bihar, Rajasthan, Manipur	27
4.	4.0 hours	Kerala	01
5.	6.0 hours	West Bengal	01

Most of the states/UTs have three hours examination for mother tongue but in Lakshadweep, Bihar and Jharkhand only 2 hours are allotted. In the other four states, 2.30 hours are allotted. In West Bengal, six hours; three hours each for two papers are allotted.

MARKS FOR ANNUAL EXAMINATION

Allotted marks for mother tongue in annual examination in Class X in different states are classified in Table 21.

Table 21: Marks for Mother Tongue in Annual Examination in Class X

S. No.	Total Marks for the Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	50	Lakshadweep	01
2.	80	Delhi, Kerala, Manipur	03
3.	100	A&N Islands, Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Chandigarh, Chhattisgarh, Daman & Diu, Uttar Pradesh, Gujarat, Haryana, Jharkhand, Dadra & Nagar Haveli, Himachal Pradesh, Meghalaya, Madhya Pradesh, Maharashtra, Mizoram, Nagaland, Orissa, Rajasthan, Tamil Nadu, Tripura, Uttarakhand, Sikkim, Jammu & Kashmir, Goa	27
4.	125	Karnataka	01
5.	150	Punjab	01
6.	200	West Bengal, Pondicherry	02

In twenty-seven states/UTs, 100 marks for examination of mother tongue are allotted 150 marks for two papers viz., 75 marks for each paper are allotted by Punjab and 200 marks for two papers viz. 100 for each paper are allotted by Pondicherry and West Bengal.

TEACHING OF ENGLISH

Table 22 shows the number of class periods devoted to teaching English in the weekly time-table.

Table 22: Periods Allotted For English Language per Week for Class X

Sr. No.	Period per Week	Name of the States/UTs	No. of the States/UTs (N=35)
1.	5	Karnataka, Kerala, Nagaland, Lakshadweep, Jharkhand, Meghalaya	06
2.	6	Chhattisgarh, Daman & Diu, Uttar Pradesh, Madhya Pradesh, Orissa, Pondicherry, Rajasthan, Tripura, Uttarakhand, West Bengal, Gujarat, Dadra & Nagar Haveli, Bihar, Manipur, Andhra Pradesh	15

3.	7	Andhra Pradesh, Mizoram, Delhi, Punjab, Tamil Nadu	05
4.	8	A&N Islands, Maharashtra, Assam, Haryana, Chandigarh, Himachal Pradesh, Jammu & Kashmir, Goa	08
5.	9	Arunachal Pradesh	01
6.	10	Sikkim	01

Sikkim has 10 periods per week for teaching English, whereas five periods are allotted in Karnataka, Kerala, Jharkhand, Nagaland, Meghalaya and Lakshadweep. Six periods per week are allotted in the remaining 15 states/UTs. In Delhi, 7 hours for language-I and 6 hours for language-II are allotted

TIME FOR ANNUAL EXAMINATION

The time allotted in the annual examination to English in Class X is given in Table 23.

Table 23: Time Allotted in Annual Examination to English in Class X

Sr. No.	Maximum Time for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	2.0 hours	Jharkhand	01
2.	2.30 hours	Andhra Pradesh, Kerala, Lakshadweep, Orissa, Tamil Nadu, Pondicherry, Karnataka	07
3.	3.0 hours	A&N Islands, Assam, Chandigarh, Chhattisgarh, Daman & Diu, Goa, Gujarat, Himachal Pradesh, Haryana, Jammu & Kashmir, Mizoram, Meghalaya, Nagaland, Punjab, Tripura, Arunachal Pradesh, Sikkim, Pondicherry, Delhi, Maharashtra, West Bengal, Dadra & Nagar Haveli, Uttar Pradesh, Madhya Pradesh, Uttarakhand, Bihar, Rajasthan, Manipur	27

As many as twenty-seven states/UTs have allotted three hours for annual examination in English in class X. Jharkhand has allotted only two hours. The remaining seven states have 2.30 hours for annual examination in class X.

MARKS FOR ANNUAL EXAMINATION

Marks allotted by different states/UTs in annual examination for English in class X are given in Table 24.

Table 24: Maximum Marks for Examination of English in Class X

Sr. No.	Total Marks for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	80	Delhi, Kerala, Manipur	03
2.	100	A&N Islands, Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Chandigarh, Daman & Diu, Gujarat, Himachal Pradesh, Haryana, Orissa, Jammu & Kashmir, Karnataka, Madhya Pradesh, Sikkim, Maharashtra, West Bengal, Tamil Nadu, Punjab, Dadra & Nagar Haveli, Tripura, Meghalaya, Nagaland, Jharkhand, Rajasthan, Uttarakhand, Lakshadweep, Mizoram, Chhattisgarh, Uttar Pradesh, Goa	31
3.	200	Pondicherry	01

In thirty-one states /UTs 100 marks are for examination in English language. Eighty marks are allotted in Delhi, Kerala and Manipur.

IMPLEMENTATION OF THREE- LANGUAGE FORMULA

The status of implementation of three-language formula at the secondary stage is presented in Table 25.

Table 25: Implementation of Three Language Formula

Sr. No.	Response	Name of the States/UTs	No. of the States/UTs (N=35)
1.	Yes	Maharashtra, Sikkim, A&N Islands, Andhra Pradesh, Arunachal Pradesh, Bihar, Jharkhand, Chandigarh, Chhattisgarh, Daman & Diu, Goa, Himachal Pradesh, Jammu & Kashmir, Kerala, Karnataka, Lakshadweep, Madhya Pradesh, Orissa, Uttarakhand, Rajasthan, Punjab, Pondicherry, Uttar Pradesh, Delhi, Haryana, Gujarat, Dadra & Nagar Haveli, Manipur	28
2.	No	Nagaland, Tamil Nadu, Meghalaya, West Bengal, Mizoram, Tripura, Assam	07

The three-language formula has been adopted in all the states and union territories except Nagaland, Tamil Nadu, Meghalaya, Mizoram, Tripura, Assam and West Bengal. These states have only two languages at the secondary stage.

TEACHING OF MATHEMATICS

Position regarding teaching of mathematics is reflected in Table 26.

Table 26: Periods Allotted for Mathematics per Week at Secondary Stage

S. No.	Period per Week	Name of the States/UTs	No. of the States/UTs (N=35)
1.	4	Orissa	01
2.	5	Kerala, Nagaland, Meghalaya	03
3.	6	Bihar, Chhattisgarh, Karnataka, Madhya Pradesh, Pondicherry, Tripura, Assam, West Bengal, Jharkhand, Manipur, Jammu & Kashmir	11
4.	7	Gujarat, Lakshadweep, Maharashtra, Tamil Nadu, Dadra & Nagar Haveli, Delhi, Punjab, Daman & Diu	08
5.	8	A&N Islands, Andhra Pradesh, Chandigarh, Sikkim, Rajasthan, Mizoram, Uttar Pradesh, Haryana, Himachal Pradesh, Goa	10
6.	9	Arunachal Pradesh, Uttarakhand	02

About one-third of the states allot six periods per week for teaching of mathematics, two states have allotted nine periods to this subject. Five periods are allotted in Kerala, Meghalaya and Nagaland.

The School Curriculum Framework (1975) recommended 7 periods per week, whereas 13 per cent time was recommended the 1988 curriculum framework. In a majority of the states, the periods were allotted according to the national norms.

TIME FOR ANNUAL EXAMINATION

Time allotted in the annual examination for mathematics is mentioned in Table 27.

Table 27: Time for Mathematics Examination for Class X

S. No.	Maximum Time for Examination	Name of the States/UTs	No. of the States/UTs (N=35)
1.	2.30 hours	Andhra Pradesh, Kerala, West Bengal, Lakshadweep, Maharashtra, Orissa, Pondicherry, Tamil Nadu	07
2.	3.0 hours	A&N Islands, Assam, Arunachal Pradesh, Bihar, Delhi, Daman & Diu, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Meghalaya, Madhya Pradesh, Mizoram, Nagaland, Punjab, Tripura, Uttarakhand, Uttar Pradesh, Sikkim, West Bengal, Manipur, Jharkhand, Dadra & Nagar Haveli, Goa, Chhattisgarh, Chandigarh, Rajasthan	28

In most of the states, three hours for annual examination are allotted and other eight states have 2.30 hours. In Maharashtra and Rajasthan, 5.0 hours are allotted for two papers of mathematics.

MARKS FOR EXAMINATION

Marks allotted for examinations in Mathematics in Class X are given in Table 28.

Table 28: Marks for Examination in Mathematics

Sr. No.	Total Marks for Examination	Name of the States/UTs	No. Of the States/UTs (N=35)
1.	80	Delhi, Kerala, Manipur	03
2.	100	A&N Islands, Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Chandigarh, Sikkim, Chhattisgarh, Daman & Diu, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Lakshadweep, Meghalaya, Madhya Pradesh, Mizoram, Nagaland, Goa, Pondicherry, Punjab, Rajasthan, Tripura, Tamil Nadu, Jharkhand, Dadra & Nagar Haveli, Uttar Pradesh, Uttarakhand, Orissa	30
3.	150	Maharashtra	01
4.	200	West Bengal	01

In most of the states/UTs, 100 marks are allotted. In Maharashtra 150 marks are allotted for two papers while 100 marks are allotted for two papers in Goa. In Uttarakhand, only 50 marks are allotted for the subject.

HEALTH AND PHYSICAL EDUCATION

With regard to the status of health and Physical education whether it is compulsory or an optional subject, the responses are classified in Table 29.

Table 29: Status of Health and Physical Education in Class X

S. No.	Status of Health & Physical Education	Name of the States/UTs	No. Of the States/UTs (N=34)
1.	Compulsory	A&N Islands, Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Chhattisgarh, Kerala, Lakshadweep, Nagaland, Orissa, Pondicherry, Punjab, Rajasthan, Tripura, Uttar Pradesh, Uttarakhand, Sikkim, Mizoram, Tamil Nadu, Maharashtra, Jharkhand, Manipur, Goa, Delhi, Himachal Pradesh	25
2.	Optional	Gujarat, Haryana, Madhya Pradesh, West Bengal, Karnataka, Dadra & Nagar Haveli, Meghalaya, Jammu & Kashmir, Daman & Diu	09

Health and Physical Education is a compulsory subject in twenty-five states/UTs and optional in the remaining nine states/UTs. In Chandigarh, it is an elective subject.

STATUS OF EXAMINATION

The status of examination in class X is given the Table 30.

Table 30: Status of Examination in Physical & Health Education Subject

Sr. No.	Response	Name of the States/UTs	No. of the States/UTs (N=33)
1.	Yes	Arunachal Pradesh, A&N Islands, Assam, Bihar, Daman & Diu, Gujarat, Haryana, Maharashtra, Tripura, Nagaland, Punjab, Meghalaya, Chhattisgarh, Uttar Pradesh, Delhi, Dadra & Nagar Haveli, West Bengal, Goa, Rajasthan	19
2.	No	Andhra Pradesh, Himachal Pradesh, Karnataka, Lakshadweep, Madhya Pradesh, Orissa, Pondicherry, Tamil Nadu, Uttarakhand, Mizoram, Chandigarh, Jammu & Kashmir, Manipur, Kerala	14

At secondary stage Physical and Health Education is an examination subject in nineteen states/UTs.

TEACHING PERIODS FOR HEALTH AND PHYSICAL EDUCATION

Number of periods allotted per week to teaching of Health and Physical Education in Class X is reflected in Table 31.

Table 31: Periods Allotted for Health & Physical Education per Week in Class X

Sr. No.	Period per Week	Name of the States/UTs	No. of the States/UTs (N=29)
1.	1	Kerala, Tripura, Assam	03
2.	2	Andhra Pradesh, Rajasthan, Chandigarh, Goa, Mizoram, Pondicherry, Tamil Nadu, Delhi, Orissa	09
3.	3	Gujarat, Meghalaya, Nagaland, Arunachal Pradesh, Maharashtra, Jammu & Kashmir, Dadra & Nagar Haveli, Punjab, Manipur, Daman & Diu	10
4.	4	Karnataka, Himachal Pradesh, Bihar	03
5.	5	Uttar Pradesh	01
6.	6	A&N Islands, Haryana, Madhya Pradesh	03

One period is allotted to Health and Physical Education in Kerala, Assam and Tripura and two periods in nine states. Six periods are allotted in Andaman & Nicobar Islands, Haryana & Madhya Pradesh states/UTs. 'Yoga' is added as a subject in Gujarat and Madhya Pradesh in Health & Physical education. The National Curriculum Framework (1975) recommended six periods per week, whereas 1988 school curriculum framework allotted 9 per cent of the total teaching time to this subject.

ART EDUCATION

The status of Art Education is given in Table 32.

Table 32: Status of Art Education of Secondary Education

Sr. No.	Status of Art Education	Name of the States/UTs	No. of the States/UTs (N=31)
1.	Compulsory	A&N Islands, Andhra Pradesh, Bihar, Karnataka, Kerala, Lakshadweep, Nagaland, Pondicherry, Meghalaya, Punjab, Rajasthan, Tamil Nadu, Arunachal Pradesh, Chhattisgarh, Uttarakhand, Delhi	16

2.	Optional	Daman & Diu, Gujarat, Haryana, Assam, Himachal Pradesh, Madhya Pradesh, Mizoram, West Bengal, Maharashtra, Uttar Pradesh, Tripura, Dadra & Nagar Haveli, Jammu & Kashmir, Goa, Chandigarh	15
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Sixteen states/UTs have Art Education as a compulsory subject and optional subject in fifteen states.

STATUS OF EXAMINATION

Table 33 provides information regarding the status of examination in Art Education.

Table 33: Examination of Art Education

<i>Sr. No.</i>	<i>Response</i>	<i>Name of the States/UTs</i>	<i>No. of the States/UTs (N=32)</i>
1.	Yes	Assam, Bihar, Sikkim, Chhattisgarh, Daman & Diu, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh, Punjab, Uttar Pradesh, Maharashtra, Dadra & Nagar Haveli, West Bengal, Meghalaya, Goa	18
2.	No	A&N Islands, Andhra Pradesh, Arunachal Pradesh, Lakshadweep, Mizoram, Nagaland, Rajasthan, Pondicherry, Tamil Nadu, Uttarakhand, Tripura, Chandigarh, Orissa, Kerala	14

Art education is an examination subject in eighteen states.

TEACHING PERIODS FOR ART EDUCATION

Number of class periods devoted to Art Education in the weekly timetable is given in Table 34.

Table 34: Periods Allotted to Art Education per Week at Secondary Stage

<i>Sr. No.</i>	<i>Periods per Week</i>	<i>Name of the States/UTs</i>	<i>No. of the States/UTs (N=21)</i>
1.	1	Chandigarh, Meghalaya, Sikkim, Rajasthan, Tamil Nadu	05
2.	2	Andhra Pradesh, Goa, Kerala, Maharashtra, Delhi	05
3.	3	Karnataka, Nagaland, Punjab, Gujarat, Dadra & Nagar Haveli, Daman & Diu	06

4.	4	Assam	01
5.	6	Madhya Pradesh, Uttar Pradesh, Himachal Pradesh, Haryana	04

In sixteen states/UTs Art education is allotted one to three periods per week. Six periods are allotted in Madhya Pradesh, Himachal Pradesh, Haryana and Uttar Pradesh.

Three periods were recommended in the 1975 Curriculum Framework whereas 9 per cent time was recommended in the 1988 Curriculum Framework. NCFSE (2000) recommended 2-4 periods per week for teaching this subject.

WORK EDUCATION

The nomenclature of work education is given in Table 35.

Table 35: Nomenclature of Work Education at Secondary Stage

Sr. No.	Nomenclature	Name of the States/UTs	No. of the States/UTs (N=32)
1.	Socially Useful Productive Work (SUPW)	Andhra Pradesh, Karnataka, Madhya Pradesh, Punjab, Rajasthan, Arunachal Pradesh, Sikkim, West Bengal, Chhattisgarh, Manipur, Uttar Pradesh, Uttarakhand	12
2.	Work Experience (W.E)	A&N Islands, Assam, Chandigarh, Goa, Maharashtra, Kerala, Mizoram, Nagaland, Pondicherry, Tripura, Meghalaya, Lakshadweep, Delhi (Pre-vocational Education), Bihar, Haryana (Computer Education)	15
3.	Craft (Life Oriented Education)	Tamil Nadu	01
4.	Work Education	Orissa, Gujarat, Daman & Diu, Dadra & Nagar Haveli	04

In fifteen states/UTs, work education is called Work Experience and in other twelve states it is named as Socially Useful Productive Work (SUPW). In Uttarakhand, work education is categorized under Work Experience and Entrepreneurship. In Tamil Nadu it is titled as Life Oriented Education. In Chandigarh, it is categorized both as SUPW and Work Experience.

The NCFSE (2000) recommended the name as Work Education. Work as medium of pedagogy in every curricular area has been recommended in NCF (2005). The states are following the nomenclature recommended in NCFs.

STATUS OF EXAMINATION

The status of annual examination of Work Education at the end of year is given in Table 36.

Table 36: Status of Examination of Work Education at Secondary Stage

S. No.	Examination	Name of the States/UTs	No. of the States/UTs(N=32)
1	Yes	Assam, Arunachal Pradesh, Madhya Pradesh, Sikkim, Maharashtra, Mizoram, Nagaland, Punjab, Tripura, Chhattisgarh, Delhi, West Bengal, Goa	13
2	No	A&N Islands, Himachal Pradesh, Karnataka, Lakshadweep, Meghalaya, Pondicherry, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand, Bihar, Chandigarh, Gujarat, Dadra & Nagar Haveli, Manipur, Daman & Diu, Orissa, Kerala, Haryana	19

In thirteen states, annual examination is conducted in the area of Work Education. Evaluation is, however, done at school level only.

PERIODS PER WEEK

Periods allotted per week for work education in Class X are shown in Table 37.

Table 37: Periods Allotted to Work Education per Week at Secondary Stage

Sr. No.	Periods per Week	Name of the States/UTs	No. of the States/UTs (N=19)
1.	1	Meghalaya, Tripura, Rajasthan, Assam, Tamil Nadu, Orissa	06
2.	2	Maharashtra, Mizoram, Pondicherry, Haryana, Chandigarh, Kerala, Andhra Pradesh	07
3.	3	Delhi, Karnataka, Punjab, Manipur	04
4.	4	Bihar	01
5.	5	Madhya Pradesh	01

Periods allotted for teaching of work education in a week vary from one to five in most of the states/UTs. National Curriculum Framework (1975) recommended three periods per week, whereas 13 per cent time was recommended in the 1988 Curriculum Framework. The NCFSE (2000) recommended six periods per week for teaching this subject. In Assam, Work Experience is a subject of school based evaluation and grades are awarded.

MORAL AND VALUE EDUCATION

Value education is taught as a subject in many states/UTs. One period per week is allotted in Chhattisgarh, Chandigarh, Karnataka, Pondicherry; three periods in Andhra Pradesh, two in Haryana, Meghalaya, Mizoram and Orissa and six periods in Madhya Pradesh and Maharashtra. The activities of moral and value education are done daily in Punjab. Annual examination is conducted and maximum 100 marks are awarded in Haryana and Madhya Pradesh, 25 marks in Chhattisgarh and grades are given in Goa, Maharashtra and Delhi for evaluation purposes.

MECHANISM FOR EVALUATION

The mechanism for evaluation is given in Table 38.

Table 38: Mechanism for Evaluation of Curriculum at Secondary Stage

Sr. No.	Type of Evaluation	Name of the States/UTs	No. of the States/UTs (N=33)
1.	Marking	Arunachal Pradesh, Daman & Diu, Himachal Pradesh, Lakshadweep, Mizoram, Nagaland, Pondicherry, Tripura, Tamil Nadu, Sikkim, Chhattisgarh, Gujarat, Jammu & Kashmir, Dadra & Nagar Haveli, Punjab, Madhya Pradesh, Manipur, Orissa, Uttar Pradesh, Andhra Pradesh, West Bengal	21
2.	Grading	Delhi, Kerala	02
3.	Marking for Scholastic area and Grading for Co-scholastic areas	A&N Islands, Assam, Bihar, Chandigarh, Goa, Haryana, Maharashtra, Rajasthan, Meghalaya, Uttarakhand	10

Marks are awarded in twenty-one states, the remaining ten states marks are given for scholastic areas and grades for co-scholastic areas. Grading is awarded in Delhi and Kerala only.

IMPLEMENTATION OF CONTINUOUS AND COMPREHENSIVE EVALUATION

The status of implementation of continuous comprehensive evaluation at the secondary stage is reflected in Table 39.

Table 39: Implementation of Continuous and Comprehensive Evaluation

S. No.	Response	Name of the States/UTs	No. of the States/UTs (N=35)
1.	Yes	Andhra Pradesh, Assam, Arunachal Pradesh, Karnataka, Punjab, Kerala, Nagaland, West Bengal, Maharashtra, Delhi, Uttar Pradesh, Uttarakhand, Haryana, Tripura, Manipur, Chandigarh, Himachal Pradesh	17
2.	No	Sikkim, A&N Islands, Bihar, Jharkhand, Daman & Diu, Gujarat, Dadra & Nagar Haveli, Haryana, Mizoram, Orissa, Tamil Nadu, Rajasthan, Pondicherry, Meghalaya, Jammu & Kashmir, Madhya Pradesh, Chhattisgarh, Goa	18

At the secondary stage the continuous and comprehensive evaluation is implemented in seventeen states/UTs. In Haryana and Nagaland, the CCE was introduced in 2006-2007.

SUGGESTIONS FOR IMPROVING SCHOOL CURRICULUM AT SECONDARY STAGE

- Value education, art education, physical and health education and work education should become integral part of 10-year school curriculum and more weightage should be given to these areas in school curriculum. (*Assam, Andhra Pradesh, Orissa, Jammu & Kashmir*)
- Higher level of knowledge to be included in science and mathematics (*Haryana*)
- The syllabus of social sciences should be reduced and integrated approach should be followed for teaching of social sciences. (*Arunachal Pradesh, West Bengal, Maharashtra*)
- The curriculum should have clear-cut future directions for career making so that the students can choose science, commerce or arts. (*Delhi*)
- Outdated information, difficult concepts to be deleted for reducing curriculum load. (*West Bengal, Maharashtra, Haryana, Arunachal Pradesh, Andhra Pradesh*)
- Linkages to be established between secondary and senior secondary curriculum. (*Haryana, Madhya Pradesh*)
- The curriculum should include Information and Communication Technology (ICT). (*Maharashtra, Pondicherry, Haryana, Madhya Pradesh*)
- Local examples, specifically to be included in the social sciences, science and mathematics. (*J&K, Lakshadweep, Manipur, Nagaland, Pondicherry, Maharashtra, U.P., Uttarakhand, Sikkim, Rajasthan, Mizoram, Assam*)

- All sections of society including workers, experts, teachers, educationists, elected representatives to be involved in framing curriculum. Their opinions and suggestions to be considered. (*Rajasthan, Madhya Pradesh, Punjab*)
- Grading and Continuous and Comprehensive Evaluation should be introduced in the evaluation system. (*Haryana, A&N, Chandigarh, Goa, J&K, Kerala, Manipur, M.P., Pondicherry, Andhra Pradesh*)
- The school curriculum up to secondary stage should be visualized as a unit. The totality should reflect the continuity of curricular activities. (*Kerala*)
- Capacity building programme for secondary school teachers about new techniques and methods of teaching, use of audio, video aids in classroom teaching to be organized on regular basis (*Punjab, Chhattisgarh, Delhi, Madhya Pradesh, Uttar Pradesh*)
- School Curriculum to be revised on the basis of NCF-2005. Science Subjects should be clearly indicated as physics and chemistry and not as physical science. Stress must be laid on mathematics and vernacular classes. (*West Bengal*)
- Practical work should be encouraged in all subjects i.e. science, mathematics social studies and languages. (*Jammu & Kashmir*)

Health and physical education to be made as an essential component of annual examination and time to be allocated for it. (*Jammu & Kashmir*)

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Chapter 5

Summary and Implications for Action

INTRODUCTION

The common structure of school education of 10+2 pattern was recommended by the Education Commission (1964-66) and resolved in the National Policy in 1968. This structure was mostly followed by all States and Union Territories by the late seventies. The NCERT took the responsibility for developing curriculum for the 10+2 pattern. The Ten-year School Curriculum- Framework was brought out by NCERT in 1975 for the first time. The document recommended stage- wise objectives of general and content methodology of teaching, instructional aids and materials, evaluation and feedback and implications for implementation. In 1977, a review committee under the chairmanship of Ishwarbhai J. Patel was appointed to review the Ten-year School Curriculum. The Committee recommended alternative courses in science and mathematics. A significant recommendation was the replacement of work experience with Socially Useful Productive Work (SUPW). In 1988, the NCERT brought out National Curriculum Framework for Elementary and Secondary Education on the basis of National Policy on Education, 1986. This document outlined emerging concerns and imperatives, organization of curriculum, evaluation and examination and its implementation. The Minimum Levels of Learning (MLL) and ten core components were emphasized in this document. In the light of NPE, 1986 recommendation, the NCERT reviewed and brought out National Curriculum Framework for School Education in 1988. This document highlighted contexts and concerns, organization of curriculum at elementary, secondary and senior secondary levels and better management the system. A common scheme of studies was advocated from classes I to X. Even the common scheme of studies up to class X was recommended in NCF 2000 and 2005. The core component areas and values shall form an integral part of the curriculum at all the stages and were recommended to be integrated in different subject areas.

PRESENT STUDY

Since education is on the concurrent list, the curriculum is being implemented differently by different states and union territories. The weightage to different curricular areas varies across states/UTs. In this study an attempt has been made to study the status of ten-year school curriculum in different states and union territories. The questionnaire, covering weight-age to different areas of school curriculum, subject nomenclature, transactional approaches and curriculum evaluation was developed which was mailed to all the states and Union Territories to collect the required information as on 2004 and updated during 2010-11. After collecting the data, descriptive analysis was carried out.

FINDINGS

Significant findings of the study are given below:

Primary stage

- The primary stage consisted of classes I to IV in seven states/UTs whereas in twenty eight remaining states/UTs, it comprises classes I to V.
- The curriculum, syllabus and textbooks prepared by NCERT were generally adopted with certain modifications by most of the states/UTs professional body at national level, because NCERT has been developing curriculum, syllabus and textbooks, long since and also have vast experiences in this field. The other major agencies and institutions for constructing curriculum and textbooks were SIEs, SCERTs, SIERTs Textbook Boards, Boards of School Education and Boards of Primary/Secondary Education.
- The total school working days in a year were a minimum of 180 in Nagaland and Manipur and maximum to 253 in Bihar and Jharkhand. But in more than sixty per cent of the states/ UTs the working days were between 201 and 220. Keeping their socio-cultural and geographical conditions in view, maximum working days were allotted by Bihar and Jharkhand had maximum number of working days in a year.
- The duration of school hours is of 2.30 hours in Assam. In eighteen states the school hours had 6.30 hours duration in a day. In a majority of states/UTs, the school hours were between 5.30 to 6.30 hours.
- The total periods per week were between 19 in Madhya Pradesh to 48 in A&N Islands, Uttarakhand, Goa, Tripura, Himachal Pradesh and Uttar Pradesh.
- The duration of a period was minimum 35 minutes in Arunachal Pradesh, Goa, Maharashtra, Nagaland and West Bengal and maximum 45 minutes in Andhra Pradesh, Bihar, Kerala, Delhi, Manipur, Pondicherry, Tripura, Jharkhand, Jammu & Kashmir, Punjab and Tamil Nadu.
- In a majority of states/UTs, there was only one break for recess period but there were two recess periods in Lakshadweep, Tamil Nadu and Sikkim. There were three recess periods in Andhra Pradesh, Gujarat, Kerala, Maharashtra, Dadra & Nagar Haveli, Mizoram, Chhattisgarh, Madhya Pradesh and Daman and Diu. The duration for recess break was a minimum of 15 minutes in Pondicherry and a maximum of 80 minutes in Andhra Pradesh and Kerala.
- The nomenclature of science was General Science in five States/UTs and Environmental Studies in remaining 23 states/UTs. The integrated approach was followed in the teaching of

Environmental Studies in 29 States/UTs. Maximum 9 periods per week were allotted for teaching of science in Rajasthan whereas only four periods were allotted in Andhra Pradesh, Pondicherry and Uttar Pradesh. Six periods were allotted in about half of the States/UTs. The time duration for annual examination of science in class V was 2.0 hours in fifteen states/UTs to 3.0 hours in sixteen states/UTs. Maximum marks for annual examination of this subject was minimum 50 in Chhattisgarh, Uttar Pradesh, Himachal Pradesh, Lakshadweep, Goa, Haryana, Jammu & Kashmir, Kerala, Punjab, Uttarakhand, Andhra Pradesh and Arunachal Pradesh and maximum 100 marks in a majority of states/UTs.

- The social science was named as environmental studies in 28 states/UTs and social studies in A & N Islands, Sikkim, Uttar Pradesh and Jammu & Kashmir. But it was named as Environment and Social Study i.e. Paribesh O Samaj Parichiti in Tripura state. In 30 states/UTs, integrated approach was followed in the teaching of social sciences in class V. The periods per week for teaching of this subject were 4 in Andhra Pradesh, Pondicherry, Uttar Pradesh and Kerala and 9 in Rajasthan and Jharkhand. Six periods were allotted in more than half the states/UTs. The time duration for annual examination was minimum 2.0 hours and maximum 3.0 hours. The maximum marks for annual examination were 100 in 24 states/UTs and minimum were 50 marks in ten states.
- The periods allotted per week for teaching of Mother Tongue in Class V were a minimum of three in Nagaland and a maximum of 13 in Maharashtra. The time duration for annual examination of this subject was minimum 2.0 hours and maximum 3.0 hours in all states/UTs.
- The periods allotted per week for teaching of English in Class V were maximum eight in A & N Islands, Assam, Sikkim, Arunachal Pradesh, Chandigarh and Himachal Pradesh and minimum three in Uttar Pradesh.
- The time duration of annual examination was minimum 1.30 hours in Sikkim; and maximum marks for examination were 100 in 22 states/UTs.
- The periods allotted per week for teaching of mathematics in Class V were maximum 12 in Andhra Pradesh and minimum five in Kerala, Meghalaya, Mizoram and Nagaland. The time duration for annual examination was 2.0 hours in about half the states/UTs and maximum 3.0 hours in fifteen states/UTs. The maximum marks for annual examination were 100 in 25 states/UTs and 50 marks in nine states.
- In most of the states/UTs, the health and physical education was a compulsory subject and it was optional in Tripura and J & K. There was an annual examination in about 50 per cent

states/UTs. Both marks and grading were used for evaluation purposes. The time allotted for annual examination was 1.30 hours to 3.00 hours in all the states/UTs.

- The periods per week for teaching of this subject in Class V were minimum two in Sikkim, Assam, Mizoram and Kerala and maximum seven in Delhi.
- In a majority of states/UTs Art Education was a compulsory subject and the examination was conducted annually. The time duration for examination was from 1.0 to 3.0 hours in all the states/UTs. Both marks and grades were awarded for evaluation purposes. Only one period per week was allotted for teaching of Art Education in Assam, Meghalaya, Pondicherry, Andhra Pradesh and Himachal Pradesh and maximum six periods were allotted in Madhya Pradesh and Uttarakhand.
- The nomenclature of work education was Socially Useful Productive Work (SUPW) in almost 40 per cent states/UTs and Work Experience in 10 States/UTs. In Tamil Nadu, it was known as Life Oriented Education (LOE). It was a compulsory subject in all the states/UTs and the time duration for annual examination was from one hour to two hours. Both marks and grades were awarded in the examination. The number of periods allotted per week for teaching of work education in Class V was only one in Meghalaya and Andhra Pradesh and maximum seven in Delhi and Orissa.
- The periods allotted per week for the teaching of moral and value education in class V were three in Andhra Pradesh and two in Karnataka, Uttar Pradesh, Chandigarh and Sikkim, four in Goa and six in Madhya Pradesh. The time duration for annual examination was one to two hours, and both marks and grades were awarded for examination and evaluation purposes.
- In the curriculum evaluation, marks were given for the examination purposes in 15 States/UTs and in sixteen States/UTs, marks were given for scholastic areas and grades were awarded to co-scholastic areas. Besides, the continuous comprehensive evaluation was implemented in 23 States/UTs.

Upper Primary Stage

- The upper primary stage included classes VI to VIII in twenty seven states/UTs, VI & VII in Andhra Pradesh, V to VII in six states/UTs and V to VIII in West Bengal.
- The major agencies involved in curriculum construction were SIEs, SCERTs, SIERTs and Board of School Education & Board of Secondary Education. However, in seven states NCERT curriculum and syllabus was followed.

- In 18 States/UTs, the working days ranged from 201 to 220. There were 240 working days in Rajasthan; overall, a minimum of 180 days were noted in Manipur and a maximum of 253 days in Bihar and Jharkhand.
- The total duration of a school hours were from 5.00 hours to 7.00 hours. In 18 States/UTs, the duration was of 6.00 hours. Double shift school timings are (7 to 12 noon) 5 hours & (10:30 to 4:30 p.m.) 6 hours.
- The total number of periods per week at upper primary stage varies from 35 in Kerala, Pondicherry, Nagaland and Mizoram; and maximum 54 in Himachal Pradesh & Haryana. In eleven states/UTs, 48 periods were allotted.
- The duration of periods was minimum 35 minutes in Daman & Diu, Goa, Himachal Pradesh, Maharashtra, Uttarakhand, Haryana, Gujarat and Dadra & Nagar Haveli; and maximum 45 minutes in Andhra Pradesh, Assam, Kerala, Tamil Nadu, Manipur, Nagaland, Pondicherry, Jammu & Kashmir, Meghalaya and Madhya Pradesh. In seventeen states/UTs, the duration of period was 40 minutes. In Rajasthan the first six periods are allotted 40 minutes and the remaining 2 periods are allotted 30 minutes. In Uttarakhand, first 4 periods are of 40 minutes and last 4 periods are of 35 minutes duration.
- In a majority of States/UTs there was only one break for recess whereas there were three breaks in Gujarat, Kerala, Andhra Pradesh, Dadra & Nagar Haveli, Madhya Pradesh, Chhattisgarh and Daman & Diu. In Lakshadweep, Maharashtra, Tamil Nadu, Sikkim and Mizoram, there were two breaks for recess. The maximum duration of recess period was 80 minutes in Andhra Pradesh and Kerala followed by 50 minutes in Mizoram, Sikkim, Gujarat, Dadra & Nagar Haveli, Daman & Diu and Chhattisgarh and the minimum was 15 minutes in Pondicherry.
- Science at upper primary stage was named as General Science in 15 states/UTs, science in 14 and Physics, Chemistry and Biology in West Bengal state. The integrated approach was followed in the teaching of science in 21 states/UTs and disciplinary approach in 13 States/UTs. The periods allotted per week to science in class VIII varies from 5 to 8. The time duration for annual examination of this subject was from 2.0 hours to 3.0 hours. The marks allotted were only 50 in Jammu & Kashmir, Chhattisgarh, Goa and Lakshadweep but maximum 100 were in other 28 States/UTs.
- The nomenclature of Social Sciences was social studies in 8 states/UTs and History, Geography & Civics in two states. It was named as Social Sciences in 22 States/UTs. The

integrated approach was followed for teaching of this subject in 18 states/UTs and disciplinary approach was in 16 states/UTs. The periods per week for teaching of social sciences in class VIII were only 2 in Orissa and maximum 8 in A & N Islands, Delhi and Arunachal Pradesh. The time allotted by different states/UTs was between 1.0 hours to 11.20 hours for annual examination. The marks allotted for annual examination was from 50 to 200.

- The number of periods per week for teaching of mother tongue was from 4 to 13. The time duration for annual examination was between 2.0 hours to 4.0 hours and the marks allotted were from 50 in Jammu and Kashmir, Lakshadweep, Goa and Chhattisgarh to 100 in 28 states/UTs.
- The periods per week for teaching of English subject in class VIII were from minimum 5 in Bihar, Karnataka, Kerala, Nagaland, Jharkhand, Mizoram, Uttar Pradesh, Gujarat, Dadra & Nagar Haveli and Daman & Diu to maximum 9 in Jammu and Kashmir. The time allotted for annual examination was between 2.0 hours to 5.40 hours and the marks allotted were from 50 in Chhattisgarh, Kerala, Jammu & Kashmir and Uttar Pradesh to maximum 100 in 29 states/UTs. Besides this, the three-language formula had been implemented in 33 States/UTs except Nagaland and Tamil Nadu.
- The periods allotted per week for teaching of Mathematics in class VIII were minimum 5 and maximum 9. The time allotted for examination was 1.0 hours to 3.0 hours and the marks allotted for annual examination were 50 in five states/UTs and 100 in 28 states/UTs.
- The Health and Physical Education was a compulsory subject in a majority of states/UTs. The periods allotted per week for teaching of Health and Physical Education in class VIII was minimum one in 2 states/UTs and maximum 5 in Meghalaya and Uttarakhand. The time allotted for annual examination was 1.0 hour in Arunachal Pradesh and 3.0 hours in Gujarat, Daman & Diu, Meghalaya and Dadra and Nagar Haveli.
- Art Education was a compulsory subject in 29 States/UTs and optional in remaining five states/UTs. The periods allotted for teaching of Art Education in class VIII was minimum one in Meghalaya, Tripura, Sikkim, West Bengal, and Manipur, Tamil Nadu and Orissa and maximum six in Himachal Pradesh state.
- Work Education was named as Socially Useful Productive Work (SUPW) in 11 states/UTs and Work Experience in 14 state/UTs. Only in Tamil Nadu Work Education was known as life orientation education. It was an examination subject only in 17 states/UTs. For teaching of this subject there was only one period in a week in Meghalaya, Tripura, Gujarat,

Dadra & Nagar Haveli, Jammu & Kashmir, West Bengal, Manipur, Tamil Nadu, Daman & Diu and Orissa and maximum four periods in a week in Bihar, Karnataka and Rajasthan.

- The Moral and Value education is taught at upper primary stage as a subject in Karnataka, Chandigarh, Maharashtra, Pondicherry, Sikkim, Andhra Pradesh, Haryana, Orissa, Meghalaya, Mizoram, Uttar Pradesh, Goa and Madhya Pradesh state. Six periods per week are allotted in Maharashtra and Madhya Pradesh and three in Haryana
- In the curriculum evaluation, generally marks were awarded in twenty states/UTs whereas marks were awarded for scholastic aspects and grades were awarded for co-scholastic aspects in twelve states. The continuous comprehensive evaluation was implemented in 16 states only.

Secondary Stage

- Secondary stage consists of classes IX and X in 28 states/UTs whereas in remaining seven states/UTs, it consisted of classes VIII to X.
- The curriculum and syllabus of NCERT was followed in 9 states/UTs with necessary modifications according to their own situations. The Boards of School Education/ Board of Secondary Education are responsible for constructing curriculum and syllabus in sixteen states. The SIEs/SCERTs of eight states also are developing curriculum at this stage. In Pondicherry the curriculum and syllabus are developed by Textbook Board.
- The number of working days in a year at secondary stage was minimum 160 in Manipur and maximum 259 in Assam. Fourteen states/UTs had the working days between 210 and 220.
- The total duration of a school day was minimum 5.0 hours in Madhya Pradesh, Chhattisgarh and Goa and maximum 6.30 hours in Arunachal Pradesh and Jharkhand. But working hours were 6.00 hours in twenty states/UTs.
- The number of periods allotted per week for teaching various subjects was minimum 34 in Chhattisgarh and maximum 54 in Arunachal Pradesh and Haryana. Forty-eight periods were allotted in 11 states/UTs.
- The duration of periods was minimum 35 minutes in Daman & Diu, Goa, Himachal Pradesh, Maharashtra, Haryana, Gujarat, Dadra & Nagar Haveli and Chhattisgarh and maximum 45 minutes in Kerala, Manipur, Nagaland, Pondicherry, Tamil Nadu, Mizoram, Jammu and Kashmir, Bihar, Karnataka and Meghalaya.

- In a majority of twenty-five states/UTs, there was only one break for recess but two in five states and three in Andhra Pradesh, Gujarat, Kerala, Dadra & Nagar Haveli, Maharashtra and Daman & Diu. Minimum 15 minutes time was allotted in Pondicherry and Goa. It was followed by Kerala by allotting 80 minutes time.
- The nomenclature of Science was named as General Science in nine states/UTs, Science in twelve and Physics, Chemistry and Biology in four states/UTs. The integrated approach for teaching of science was used in 17 states/UTs and disciplinary approach was used in 17 states/UTs. Minimum five periods per week were allotted in Nagaland and Meghalaya and maximum nine periods in Chandigarh, Lakshadweep, Arunachal Pradesh, Uttarakhand and Delhi for teaching this subject. For annual examination of science subject minimum 2.30 hours in seven states and maximum 6.00 hours in Tripura were earmarked. Maximum 200 marks for annual examination were allotted in 2 states/UTs, 120 marks in Kerala and 150 marks in Jharkhand.
- The nomenclature of Social Sciences was Social Studies in 3 states/UTs, Social Sciences in twenty-four states/UTs and History, Geography, Civics and Economics in seven states/UTs. The integrated approach was used for teaching of Social Sciences in 14 states and disciplinary approach in twenty states. The periods allotted per week for teaching of social science were minimum 5 in five states and maximum 9 in Chandigarh, Arunachal Pradesh, Uttarakhand and Delhi. The time allotted for annual examination was minimum 2.30 hours in Andhra Pradesh, Pondicherry, Tamil Nadu, Kerala and Orissa and maximum six hours in Tripura, West Bengal and Jharkhand. The maximum marks allotted for examination were 200 in West Bengal and Tripura followed by 100 in remaining 29 states/UTs.
- For teaching of Mother Tongue, the minimum of 4 periods per week were allotted in Lakshadweep and Mizoram and maximum nine in West Bengal and Uttar Pradesh. Six periods were allotted in 20 states/UTs. The time allotted for annual examination was 2.0 hours in Jharkhand and Lakshadweep and six hours in West Bengal. The marks allotted for examination were 50 in Lakshadweep, 100 in 29 states/UTs, 150 in Punjab and 200 in West Bengal and Pondicherry for two papers.
- For teaching of English language, minimum five periods per week were allotted in six states/UTs and maximum 10 in Sikkim. The time allotted for annual examination was minimum 2.0 hours in Jharkhand and maximum 3.0 hours in twenty-eight states/UTs. The marks allotted for examination were 80 in Manipur, Delhi and Kerala, 100 in maximum states/UTs and 200 in Pondicherry only.

- Three-language formula was followed in all the states/UTs except Nagaland, Tamil Nadu, Meghalaya, West Bengal, Mizoram, Tripura and Assam.
- The periods allotted per week for teaching of mathematics were minimum four in Orissa and maximum nine in Arunachal Pradesh and Uttarakhand states. In eleven states six periods per week for teaching of mathematics were allotted. The time allotted for examination was minimum 2.30 hours in 8 states/UTs and 3.0 hours in remaining 28 states/UTs. The marks allotted for examination were 80 in Delhi, Manipur and Kerala, 100 in 30 states/UTs, 150 in Maharashtra and 200 in West Bengal.
- The Health and Physical education was found to be a compulsory subject in most states/UTs and annual examination was also conducted in more than sixty per cent of states/UTs. Only one period was allotted per week for teaching of this subject was only one in Kerala, Tripura and Assam and six were allotted in A&N Islands, Haryana and Madhya Pradesh.
- Art Education was a compulsory subject in sixteen states/UTs whereas it was optional in 15 states/UTs. The annual examination was also conducted in more than fifty per cent states/UTs. Only one period was allotted for teaching of Art Education per week was only one in five states and maximum six in Madhya Pradesh, Uttar Pradesh, Haryana and Himachal Pradesh states.
- Work Education was named as Socially Useful Productive Work in 9 states/UTs, Work Experience in 15 and Life Oriented Education in Tamil Nadu. The annual examination was conducted in 13 states/UTs. The periods allotted for teaching per week were only one in Meghalaya, Tripura, Rajasthan, Assam, Tamil Nadu and Orissa and maximum five in Madhya Pradesh.
- Moral and Value education was taught as a separate subject in twelve states/UTs. The time for annual examination was minimum 30.0 minutes in Chhattisgarh and maximum 2.00 hours in Haryana.
- For curriculum evaluation, marking was used in twenty-one states/UTs and in the remaining ten states/UTs, the marks were awarded for scholastic and grading was used for co-scholastic aspects. The continuous and comprehensive evaluation was followed only in seventeen states/UTs.

In the end, it can be stated that there are a lot of variations in terms of structure, working hours, recess periods, teaching of different subjects, evaluation pattern etc. at primary, upper primary and secondary stages.

IMPLICATIONS FOR ACTION

Implications for Action have been derived from the findings of the study and also compared with the earlier National Curriculum Frameworks developed by NCERT in 1975, 1988, 2000 and 2005. These are discussed in terms of structure of education, working hours, nomenclature of different subjects, periods allotted for teaching different subjects, teaching approaches etc. in this section. For a comparative study of the recommendations made in previous Curriculum Frameworks and the outcomes of the present study, the tabular format has been adopted. The implications are stated in the last column.

Comparative Analysis of Curriculum Frameworks developed by NCERT and Implications of the Study

1. Curriculum Frameworks & Implications derived from the Study- 2011				
1975	1988	2000	2005	Implications on 2011
The Curriculum for the Ten Year School	National Curriculum for Elementary & Secondary Education	National Curriculum Framework for School Education	National Curriculum Framework	The implications for action are derived from the findings of the study
2. Process of Curriculum Development				
Formulation of a broad based curriculum group consisting of external experts as well as the experts of NCERT.	Formulation of working group for quick appraisal of existing Curriculum (1983). NCERT initiated research and evaluation studies related to different aspects of Curriculum.	Formulation of Curriculum group consisting of NCERT faculty only.	Setting up of five structures : - National Steering Committee - National Focus Groups (21) - Committee for consultation with states - Research Unit - Coordination Committee	In most of the States/UTs, SIEs/SCERTs are the main agencies for developing the curriculum at primary and upper primary stages where as the Boards of School Education are mainly responsible for secondary education. The NCERT curriculum and syllabus is also followed in some
Appointment of sub committees on different subject areas consisting of NCERT faculty.	Formulation of an in house steering group in NCERT.	Consultation with faculty members of NCERT and eminent experts.	Development of a draft document incorporating inputs from National Focus Groups' position papers, Regional Seminars, states' suggestions and also suggestions from NCERT (NIE, RIE, PSSCIVE, CIET) faculty.	
Development of an approach paper and its circulation	Curriculum concerns and	Development of a discussion document on	Presentation and Discussion on one National Curriculum Framework-2005 (draft) in the meeting of CABE held in June	

throughout the country for comments.	issues identified by the steering group discussed in National Seminar and four regional seminars.	National Curriculum Framework for School Education.	2005	states/UTs like A&N Islands, Chandigarh, Arunachal Pradesh, Jharkhand and Himachal Pradesh. The states have set up committees and sub-committee for developing school curriculum and syllabi. Curriculum committees should be broad-based by involving state and national level experts, educationists, teacher educators, teachers, NGOs researchers, and social activists etc. The Committees should develop focus group papers on various emerging issues and these papers should be circulated widely in the Country for comments and suggestions. Seminars and meetings should be organized at
Organization of National Conference to discuss Framework.	Preparation of draft National Curriculum Framework	Circulation of discussion document for comments and suggestions.	As per the recommendations of CABE, translation of NCF-2005 in languages listed in due VIII schedule of the Constitution was done and translated versions of NCF was sent to respective states for comprehensive discussions.	
	Discussion of draft with experts at national level meeting and revision of draft on the basis of experts' suggestions.	Presentation of Discussion Document in National and regional seminars	Based on states suggestions, a modified draft of NCF-2005 was prepared and placed before CABE in Sept.2005 where it got approved.	
	Presentation of draft Curriculum Framework for approval in CABE	Comments obtained from different institutions, voluntary organization, teacher organizations, parent teacher bodies, expert bodies and even students at the higher secondary stage were looked into and analyzed & suggestions were taken into consideration for finalization of the draft. Draft NCFSE finalized at NCERT level		

				schools, blocks, districts and state levels for discussing these papers. In this way, the emerging and pertinent issues concerning all sections of the society would be included in the curriculum, syllabus and textbooks.
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3. Classes covered				
Classes I to X	Classes I to X	Classes I to XII	Classes I to XII	There is common curriculum and syllabus up to class X in almost all the states/Union Territories. The states/UTs generally adopt or adapt the National Curriculum Framework prepared by NCERT

4. Stages				
(I) Primary Stage (classes I-V)	Primary Stage (classes I-V)	Primary Stage Segment I (Classes I & II)	Primary Stage (Classes I-V)	The structure of school education is not common in the country. In seven states/UTs, the classes from I to IV are covered at primary stage and classes from I to V are covered in remaining twenty-eight states/UTs. At upper primary stage classes VI & VII are covered in Andhra Pradesh and classes from V to VII are covered in Assam, Goa, Kerala, Lakshadweep, Meghalaya & Mizoram states. In the remaining 27 states/UTs the national pattern covering classes VI to VIII is followed. In West Bengal, classes V
i) Middle Stage (classes VI-VIII)	Upper Primary Stage (classes VI-VIII)	Segment II (Classes III-V) Upper Primary Stage (Classes VI-VIII)	Upper Primary Stage (Classes VI-VIII)	
ii) Lower Secondary Stage (classes IX-X)	Secondary Stage (classes IX-X)	Secondary Stage (Classes IX-X) Higher secondary stage (Classes XI-XII)	Secondary Stage (Classes IX-X) Higher Secondary Stage (Classes XI-XII)	

				<p>to VIII are included at this stage. At secondary stage, classes from VIII to X are covered in 7 states/UTs and in the remaining 27 states IX and X classes are covered at secondary stages.</p> <p>However, the National Curriculum Framework (1975, 1988, and 2000) suggested classes I to V classes VI to VIII and classes IX and X to be covered at for primary, upper primary and secondary stages. All the states/UTs should also follow national level structure for effective implementation of various educational policies and mega flagship scheme of Govt. of India.</p>
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5. Working days in a year				
Primary Stage - Minimum 240 days (220 for instruction) and 20 days for other school activities)	200 days	Minimum 180 effective instruction days for all stages	200 Days	<p>There is a lot of variation in the number of working days in different states/UTs. The minimum working days were 180 in Manipur & Nagaland and maximum 253 in Bihar & Jharkhand at primary stage. At upper primary stage the minimum working days were 180 in Manipur and 253 and Bihar and Jharkhand. The total working days are between 200 to 240 in most of the states/UTs up to secondary stage with minimum 160 in Manipur and maximum 259 in Assam followed by 253 in Bihar and Jharkhand. Most of the states are following the national pattern by</p>
Upper primary stage - 240 days	200 days	-do -	200 Days	
Secondary stage - 240 days	200 days	-do -	200 Days	

					introducing working days between 180 to 200 for effective instruction. The remaining states may also follow national pattern for better implementation of school education.
6. Instructional time per day in school					
<i>Primary Stage</i>	3 to 4 hrs a day for instruction +1 hr for prayer and other activities	5 hrs a day (4 hr+1 hr)	5 hrs a day (4 hours+1 hour)	6 hours a day	There is a lot of variation in instructional time in each school in the country. At primary stage, the minimum school hours per day are reported 2.30 hours in Assam where as maximum is 6.30 hours in eighteen states. But in majority of the states/UTs, the school hours are between 5.30 hours to 6.30 hrs. The National Curriculum (1988, 2000) suggested 5 hours including 4 hours for instruction and one hour for other activities per day. At upper primary & secondary stage, the minimum school hours per day are reported 5 hours in Chhattisgarh and the maximum are 7.00 hours in Sikkim. In remaining majority of states the working hours are reported between 5.15 hours to 6 hours on the lines of National Curriculum Framework.
<i>Upper primary Stage</i>	5 hrs + 50 minutes(for morning assembly)	6 hrs (5hrs +1hr)	6 hrs (5 hrs+1 hr.)	6 hrs (5 hrs+1 hr.)	
<i>Secondary Stage</i>	5 hrs+50 minutes (for morning assembly and recess)	6hrs (5hrs +1hr)	6 hrs (5hrs +1hr)	6 hrs (5 hrs+1 hr.)	

7.Periods per week

Primary Stage	Percentage allocated to different areas	Time allocated to different areas	Time allocated to different areas	No. of periods is not specified. However, it is mentioned that the weekly time table could allow for variation from due regular routine but should be balanced over the week. It is essential to take stock of the time spent in learning different subject areas and to introduce corrections if the teacher finds that more or less time is being spent or is needed, that originally foreseen/planned. The document further mentions that there is also a need for the school timetable to allow for other kinds of longer periods lasting an hour, or one and a half hours (a double period), for other kinds of activities such as craft or Art work projects and lab work.	The periods allotted per week for teaching of different subjects also vary in different states/UTs. At primary stage, the minimum 19 periods are allotted in Madhya Pradesh whereas the maximum 48 periods were allotted in A&N Islands, Uttarakhand, Goa, Tripura, Himachal Pradesh and Uttar Pradesh. At upper primary and secondary stage, the minimum are reported 35 periods per week in Kerala, Pondicherry, Nagaland and Mizoram whereas maximum number of 54 periods in Himachal Pradesh and Haryana. In majority of states, it is between 35 to 48 periods per week. The states may allocate percentage of time to different areas per week as suggested in the entire national curriculum for better teaching learning process.
Upper primary stage	48	-do-	-do-		
Secondary Stage	48	-do-	-do-		

8. Duration of a Period

30 to 40 minutes	Around 40 minutes	Around 40 minutes	Around 45 minutes	The duration of periods for teaching various subjects are different in different States/UTs. The minimum duration of period was 30 minutes in Rajasthan and maximum 45 minutes in Andhra Pradesh, Bihar, Delhi, Tripura, Jharkhand, Punjab Kerala, Tamil Nadu, Manipur, Nagaland, Pondicherry, Jammu & Kashmir and Madhya Pradesh. It is almost in consonance with national curriculum.

9. Recess break

Primary Stage	One or two	One or two	Not mentioned	Not mentioned	<p>There is lot of variation in the recess breaks in schools in the country. In 23 states/UTs, there was one recess break between 30 to 50 minutes, two recess breaks are found in five states/UTs namely Lakshadweep, Maharashtra, Tamil Nadu, Sikkim and Mizoram and three breaks are reported in Gujarat, Kerala, Andhra Pradesh, Dadra & Nagar Haveli, Madhya Pradesh, Chhattisgarh and Daman & Diu. In Maharashtra, three recess breaks (10M+60M+10M=80M) were found at primary stage and two breaks (10M+30M=40M) at upper primary & secondary stages. Only in National Curriculum, (1975), one or two recess breaks are suggested at primary stage and one break was suggested at upper primary and secondary stages. It may be followed by other states/UTs. The duration may be between 30' to 40 minutes.</p>
Upper primary	One		Not mentioned	Not mentioned	
Secondary	One		Not mentioned		

10. Science

Primary Stage	Environmental study for class I & II Environmental studies II (Science) for III, IV & V	Environmental studies (I and II) Environmental Studies II (III, IV- V)	For Class I & II content of Environmental Studies is integrated in languages and Mathematics Environmental Studies (From Class III to V)	<p>The nomenclature of sciences subject is not common in the country. In five states, science is named as General Science whereas in majority of twenty three states named as Environmental Studies-I and Environmental Studies-II at primary stage. At upper primary stage, the nomenclature is General Science in fifteen States/UTs, Science in fourteen states and Physics, Chemistry and Biology in West Bengal. At secondary stage, it is named as General Science in nine states, Science in 12 states and Physics, Chemistry and Biology in four states. It may be named as Environmental Studies at primary stage and Science at upper primary and secondary stages as suggested in NCF (2005)</p>
Upper Primary Stage	Science (Life Science & Physical Science)	Science	Science	
Secondary Stage	Science (Life Science & Physical Science)	Science	Science	

11. Approaches of teaching Science

Primary Stage	Integrated approach	Integrated approach	Integrated approach	Thematic and Integrated Approach	Integrated approach for teaching of science is followed in twenty-nine states at primary stage, 21 at upper primary and seventeen at secondary stage. The remaining states are following disciplinary approach. Integrated approach for teaching of science may be followed in all the states/UTs as suggested in National Curriculum Frameworks.
Upper Primary Stage	Integrated approach	Integrated approach	Integrated approach	Thematic and Integrated Approach	
Secondary Stage	Integrated approach	Integrated approach	Integrated approach	Integrated Disciplinary Approach	

12. Time/Periods allotted per week for teaching of Science

Primary Stage	25% of total time allocated to different subjects per week	15% of total time allocated to different subjects	Not Specified	Not Specified	The periods allotted per week for teaching of science are not common. Minimum four periods per week are allotted in Andhra Pradesh, Pondicherry and Uttar Pradesh, six periods in sixteen states, nine periods in Rajasthan at primary stage. At upper primary stage, minimum 5 periods in Maharashtra, Nagaland, Orissa, Haryana and Uttar Pradesh, six periods in twenty-four states/UTs and eight periods in four states/UTs. At secondary stage, five periods in Meghalaya and Nagaland, six periods in eleven states/UTs, and nine periods in Chandigarh, Lakshadweep, Arunachal Pradesh, Uttarakhand and Delhi. The National Curriculum Framework (1988) had suggested time allocation per week at different stages for teaching of science. It may be followed by the different states/UTs for effective teaching.
Upper Primary Stage	7 periods per week	12% of total time per week	180 periods in a year	Not Specified	
Secondary Stage	7 periods per week	13% of total time per week	240 periods in a year (180 Periods for Theory, 60 Periods for Practical)	Not Specified	

13. Teaching of Social Sciences

Primary Stage	Environmental Study (Class I & II)	Environmental Studies (Class III-V)	Environmental Studies	For class I&II content of Environmental Studies (EVS) is integrated in language and Mathematics	The nomenclature of social sciences is different in schools in the country. At primary, Science is named as Environmental studies in twenty-nine states, social studies in four states. At upper primary stage, it is named as social studies in eight states/UTs, social
	Environmental Studies-I (Classes III-V)	Environmental Studies (Classes III-V)	Social Sciences	Environmental Studies (From Class III to V)	

Upper Primary Stage	Social Sciences (History, Geography, Civics, Economics)	Social Sciences I	Social Sciences	Social Studies (History, Geography & Political Sc.)	sciences in twenty-two states/UTs and History, Geography and Civics in two states/UTs. At secondary stage, it is named as social studies in three states/UTs, social sciences in twenty-four states/UTs and History, Geography, Civics and Economics in seven states, /UTs, All the states/UTs may follow Environmental studies at primary level and Social Sciences at upper primary and secondary stages as suggested in the entire three National curriculum Frameworks.
Secondary Stage	Social Sciences	Social Sciences	Social Sciences	Social Sciences (History, Geography, Political Science and Economics)	

14. Approaches for Teaching of Social Sciences

Primary Stage	Integrated Approach	Integrated Approach	Integrated Approach	Integrated Approach	Different approaches are used in teaching of Social Sciences subjects in schools. Integrated approach is followed in teaching of Social Sciences in thirty states / UTs, in eighteen states/UTs at upper primary and at secondary in fourteen states/UTs. The disciplinary approach is being followed in three states at primary, sixteen states/UTs at upper primary and twenty states/UTs at secondary stages. It is suggested that the integrated approach may be followed in all the states/UTs as suggested in National Curriculum Frameworks.
Upper Primary Stage	Integrated Approach	Integrated Approach	Integrated Approach	Disciplinary (Integrated & Multi disciplinary Approach)	
Secondary Stage			Integrated Approach	Disciplinary (Integrated & Multidisciplinary Approach)	

15. Time/Periods allocated per week for Teaching Social Sciences

Primary Stage	20% of total time per week	15% of total time per week	Not mentioned	Not Specified	There are lots of variations in allotment of periods per week for teaching of social science subject. At primary stage, four periods are allotted per week in Andhra Pradesh, Pondicherry, Uttar Pradesh and Kerala, six periods in nineteen states, / UTs, nine periods in Rajasthan and Jharkhand. At upper primary stage, two periods are allotted in Orissa, six periods in twenty-four states/UTs, and eight periods in A&N Islands, Arunachal Pradesh and Delhi. At secondary stage, five periods are allotted in five states/UTs, six periods in sixteen states/UTs, eight periods in five states/UTs, nine
Upper Primary Stage	periods per week	12% of total time per week	210 periods in a year	Not Specified	
Secondary Stage	periods per week	13% of total time per week	210 periods in a year	Not Specified	

					periods in four states. It is suggested that 15%, 12% and 13% of total time per week may be allocated as suggested in National Curriculum 1988.
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16. Time/Periods per week for Teaching of Mother Tongue

Primary Stage	25% of total time	30% of total time	Adequate time	Flexibility in time according to specific situation	At primary stage, the periods per week allocated for teaching of mother tongue are three in Nagaland, four in Meghalaya, nine in Uttar Pradesh, twelve in Rajasthan and Andhra Pradesh, Thirteen in Maharashtra & seven in remaining eight states/UTs. At upper primary stage, four periods in three States/UTs, six periods in twenty States/UTs, eight periods in A&N Islands, Assam, Tripura and Haryana and thirteen periods in Maharashtra. At secondary stage, four periods in Lakshadweep and Mizoram, six periods in twenty States/UTs, eight periods in four States/UTs & nine periods in Uttar Pradesh & West Bengal. It is suggested that 15%, 12% and 13% of total time may be allocated for teaching of social sciences at primary, upper primary and secondary stages.
Upper Primary Stage	8 periods	32% of total time	Adequate time	Flexibility in time according to specific situation	
Secondary Stage	6 periods	30% of total time	Adequate time	Flexibility in time according to specific situation	

17. Teaching of English

English as a second language may be introduced in Primary or middle Stage	If resources are available, English language may be introduced as second language at Primary Stage otherwise it may be introduced at Upper Primary Stage	If resources are available, English may be introduced as second language in a suitable grade/class at Primary Stage otherwise it should be introduced at Upper Primary Stage	The level of introduction of English is now a matter of political response to people's aspirations rather than an academic or feasibility issue and people's choice about the level of its introduction in the curriculum will have to be respected, with the provision that we do not extend downwards the very system that has failed to deliver. The document further mentions that within the eight years of education constitutionally guaranteed to every child, it should be possible to achieve basic English -	The National Curriculum Framework (1975, 1988, and 2000) suggested that English may be introduced at upper primary stage, and if resources are available with the state it may be introduced as second language in a suitable grade at primary stage. But, English has been introduced from Class I in twenty-six States/UTs, Class III in three States, Class IV in Lakshadweep and class V in Gujarat, Assam, Dadra & Nagar Haveli, Jharkhand and Daman & Diu. The minimums 3 periods to maximum 8 periods are allocated per week for teaching of English in different States/UTs at primary stage. This issue needs to be further studied from which class English language should be introduced as second language.
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			language proficiency in a span of about four years	
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18. Time/Periods allotted for teaching of Mathematics per week

Primary Stage (I-II)	10% of total time	15% of total time	Not mentioned	Not Specified	The period's allocations per week for teaching of mathematics vary in schools. At primary stage, five periods allotted per week in four states, six periods in seventeen states, nine periods in Rajasthan and Chandigarh. At upper primary stage, five periods are allotted in three states/UTs, six periods in fifteen states/UTs, seven periods in nine states/UTs and nine periods in J&K. At secondary stage, five periods are allotted in three states/UTs, six periods in eleven states, seven periods in eight states/UTs, eight periods in ten states/UTs and nine periods in two states/UTs. As suggested in National Curriculum Framework (1988), 15%, 12% & 13% time may be allocated at primary, upper primary & secondary stages per week for teaching mathematics.
Primary Stage (III-V)	15% of total periods	15% of total periods	Not mentioned	Not Specified	
Upper Primary Stage	7 periods	12% of total time	Not mentioned	Not Specified	
Secondary Stage	7 periods	13% of total time	Not mentioned	Not Specified	

19. Time/Periods allotted for Health & Physical Education per week

Primary Stage	25% of total time	10% of total time	Not mentioned	Not mentioned	Health and Physical Education is a compulsory subject in thirty-three states/UTs and optional in Tripura and Jammu & Kashmir. Annual examination is conducted in sixteen states/UTs. At primary stage, the minimum one period and maximum seven periods is allotted per week for teaching of this subject. At upper primary stage, minimum one period to maximum five periods are allotted for teaching this subject per week. At secondary stage, minimum one period to maximum six periods are allotted per week for teaching this subject. As mentioned in National Curriculum Framework (1988), 10% time at primary & upper primary and 9% of total time at secondary stage may be allocated for this subject.
Upper Primary Stage	6 periods per week	10% of total time	Not mentioned	Not mentioned	
Secondary Stage	6 periods	9% of total time	Not mentioned	Not mentioned	

20. Nomenclature of Art Education

Primary Stage	Work Experience & Arts	Art Education	Art of Healthy and Productive Living (No textbook for Classes I & II)	Art Education	Art education is compulsory in twenty-nine states/UTs and optional in remaining states. The annual examination is conducted in about seventeen states/UTs.
			Art Education		

Upper Primary Stage	Arts	Art Education	Art Education	Art Education	
Secondary Stage	Arts	Art Education		Art Education	

21. Time/Periods for Teaching of Art Education

Primary Stage	25% of total time per week	10% of total time per week	Not Specified	Not Specified	The periods per week are allotted from one to six at primary, upper primary and secondary stages. As suggested in National Curriculum Framework in 1988, 10% at primary & upper primary and 9% at secondary stages may be allotted for teaching Art Education subject.
Upper Primary Stage	4 periods per week	10% of total time per week	2-4 periods per week	Not Specified	
Secondary Stage	3 periods	9% of total time	2-4 periods per week	Not Specified	

22. Nomenclature of Work Education

Primary Stage	Work Experience & Art	Work Experience	Art of Healthy & Productive living	Work and Education (Work as a Pedagogy in every curricular area)	The nomenclature of this subject is not common in schools in the country. It is named as Socially Useful Productive Work (SUPW) in eleven States/UTs; Work Experience in ten States/UTs, and Life Oriented Education in Tamil Nadu. The nomenclature of Work and Education may be followed as suggested in NCF-2005.
Upper Primary Stage	Work Experience	Work Experience	Work Education	-do-	
Secondary Stage	Work Experience	Work Experience	Work Education	-do-	

23. Time/Periods per Week for Work Education

Primary Stage	25% of total time	20% of total time	Not mentioned	Not Mentioned	Work Education is compulsory in twenty-four states at primary, in seventeen states at upper primary stage and in eighteen states UTs at secondary stage. Annual examination is compulsory in these states/UTs. The periods allotted per week for teaching this subject vary from one to seven at primary, upper primary and secondary stages. It is suggested that 20%, 12% & 13% time of total time may be allocated at primary, upper primary and secondary stages as suggested in National Curriculum Framework in 1988.
Upper Primary Stage	4 periods	12% of total time	One-sixth to one-eighth of the total time	Not Mentioned	
Secondary Stage	3 periods	13% of total time	(12.5% - 17%) 6 periods	Not Mentioned	

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Status of Implementation of NCF-2005 in different states and Union Territories

Based on the implementation of NCF-2005, various activities and programmes have been initiated and undertaken by different states/union territories. The progress on NCF activities reported by the states is given in the following table:

Table 1: Status of Implementation of NCF-2005

S. No.	State/UT	Activities undertaken
1.	Andaman & Nicobar Islands	<ul style="list-style-type: none"> Follows NCERT syllabus and textbooks.
2.	Andhra Pradesh	<ul style="list-style-type: none"> Syllabus revision for classes I-X by SCERT and for classes XI and XII by the Board of School Education. Textbooks for classes' I-X were completed by 2009-10. Teacher handbook under preparation.
3.	Arunachal Pradesh	<ul style="list-style-type: none"> Adopted NCERT textbooks for classes I to XII.
4.	Assam	<ul style="list-style-type: none"> Series of seminars and workshops organized to discuss the issues of curricular concerns, examination reforms, teacher education, etc. Revision of the curriculum and the syllabus of the core subjects on the basis of NCF-2005 New textbooks were developed as per the revised syllabus and introduced in classes VIII, IX and X from the year 2008 in a phased manner. Class VIII is proposed to be included in the elementary stage. The structure of secondary stage will consist of Classes IX and X. Adopted NCERT textbooks for classes XI and XII.
5.	Bihar	<ul style="list-style-type: none"> Developed new textbooks for Social Science and language for classes IX and X. Follow the NCERT textbooks for classes IX and X for Sciences and Mathematics. Follow the NCERT textbooks and syllabi for classes XI and XII for Science, Social Science and Mathematics. Developed BCF-2008 for classes I to X in the light of NCF-2005. Developed new syllabus for classes I to X and accordingly textbooks are being developed phase wise.

6.	Chandigarh	<ul style="list-style-type: none"> • Subject committee to translate Mathematics, Science and Social Science of Class I to VIII into Punjabi medium • Translated textbooks are available. • NCERT books for class IX to XII. were adapted
7.	Chhattisgarh	<ul style="list-style-type: none"> • Revision of syllabi • Subject Groups were set up. • Distributed 3000 copies of NCF - 2005. • Textbooks for classes I, II, VI are completed and in use. • Textbooks for classes III, VII are revised and are introduced during 2007-08. • Adopted NCERT textbooks for classes XI-XII. • Textbooks for classes V, IX, X and XII are in the process of revision.
8.	Dadra & Nagar Haveli	<ul style="list-style-type: none"> • Syllabus and all textbook reviews have been completed.
9.	Daman & Diu	<ul style="list-style-type: none"> • Syllabus and all textbook reviews are completed.
10.	Delhi	<ul style="list-style-type: none"> • Revision of Urdu textbooks. • Adopted NCERT textbooks from classes I to XII.
11.	Goa	<ul style="list-style-type: none"> • Follow the NCERT Syllabi and textbooks. • Adopted NCERT textbooks from classes I to XII. • Orientation programme on English, Environmental Studies and Mathematics for (Class I-IV) completed. • Orientation programme on English, Marigold (Classes I-III) completed. • Orientation programme on English, Social Science and Hindi (Class VI) • Printing of NCF-2005 in Konkani version.
12.	Gujarat	<ul style="list-style-type: none"> • The production of all textbooks was completed in March, 2011.
13.	Haryana	<ul style="list-style-type: none"> • Revision of syllabi from class I to V was completed. • Follow the NCERT textbooks from classes VI to XII.
14.	Himachal Pradesh	<ul style="list-style-type: none"> • Revision of syllabi. • Organized workshop on quality improvement • Review of teacher education curriculum undertaken. • Workshop on strengthening SCERT and DIETs was organized. • Follow the NCERT textbooks from classes VI to XII.
15.	Jammu & Kashmir	<ul style="list-style-type: none"> • Adopted NCERT textbooks for classes IX and X. • Most of the textbooks have been revised according to NCF-2005 by the Jammu and Kashmir Board of School education.

16.	Jharkhand	<ul style="list-style-type: none"> Adopted NCERT textbooks from classes I to XII.
17.	Karnataka	<ul style="list-style-type: none"> NCF-2005 was printed in Kannada version Revision of syllabi. Textbooks are under preparation for class I to 5 & 8 and it will be introduced from the year 2012-13. For classes 6, 7, 9 and 10 textbooks are yet to be prepared for the year 2013-14. Preparation of textbooks undertaken by Karnataka textbooks society and new textbooks will be introduced in 2012-13.
18.	Kerala	<ul style="list-style-type: none"> Core Group and 14 Focus Groups were set up. NCF in Malayalam version has been printed. Based on NCF-2005, Kerala Curriculum Framework (KCF) - 2007 developed. Follow the NCERT textbooks for classes XI to XII. 14 positions papers were developed. Syllabuses were revised and modified based on NCF-2005 & KCF-2007. New textbooks for classes I, III, V and VII were introduced in 2008 year based on NCF-2005 & KCF-2007. New textbooks for classes II, IV, VI and VIII were introduced on 2009 year. New textbooks for class IX was introduced in 2010. New textbooks for class X will be introduced during 2011.
19.	Lakshadweep	<ul style="list-style-type: none"> Adopted NCERT textbooks for classes XI and XII. NCF Tamil version printed and circulated.
20.	Madhya Pradesh	<ul style="list-style-type: none"> Analyzed the existing syllabi in relation to NCF-2005 and gaps in classes IX-XII were identified by the Board of Secondary Education. New textbooks for classes IX and XI were introduced during 2007-08, and for classes X, XII during 2008-09. Textbooks have been developed by SCERT for classes IX and X and for classes XI to XII by Board of Secondary Education, Bhopal, Madhya Pradesh.
21.	Maharashtra	<ul style="list-style-type: none"> Syllabus revision for Classes I to VIII by MSCERT was completed. Production of textbook by MS Bureau of Textbook production, Curriculum and Research Syllabus revision Class IX-XII by MS Board of

		<p>Secondary and Higher Secondary Education.</p> <ul style="list-style-type: none"> • Marathi version of NCF-2005 was printed
22.	Manipur	<ul style="list-style-type: none"> • Textbooks review exercise for Class I-XII was initiated by State Board of Secondary Education and Council of Hr. Sec. Education. • Revision of syllabi was completed. • NCF-2005 in Manipur version was printed
23.	Meghalaya	<ul style="list-style-type: none"> • Revision of syllabi was completed.
24.	Mizoram	<ul style="list-style-type: none"> • Follow the textbooks of Higher Secondary schools published by NCERT for Higher Secondary classes. • The new textbooks for classes I-III, V-VIII, IX and XI based on NCF-2005 have been introduced during 2009. • Class IV, VII, X and XII introduced during 2010.
25.	Nagaland	<ul style="list-style-type: none"> • SCERT conducted a workshop on NCF-2005. • Syllabus was revised for classes I to XII. • New textbooks were developed for classes I to XII. • Steps for examination reforms such as Continuous and Comprehensive Evaluation and grading initiated.
26.	Orissa	<ul style="list-style-type: none"> • Syllabi revision from classes' I-XII completed.
27.	Pondicherry	<ul style="list-style-type: none"> • NCF-2005 Tamil version printed and circulated. • Task of reviewing and revising the syllabi and textbooks from classes I to XII undertaken. • Textbooks for classes I to VI were developed in 2009-10.
28.	Punjab	<ul style="list-style-type: none"> • Syllabi revision of classes' I-XII was completed.
29.	Rajasthan	<ul style="list-style-type: none"> • Follow the NCERT Syllabi and textbook, with additional subject 'Rajasthan Studies.' • In line with NCF, Govt. of Rajasthan has formed the SCF working committee to bridge the gap. • Orientation programme on various Science subjects in progress.
30.	Sikkim	<ul style="list-style-type: none"> • At Primary level, from Class I to V, new school curriculum, syllabi and textbooks as per guidelines of NCF-2005 developed and introduced in schools. • Text books for classes I and II developed, which made the process of teaching and learning much easier for 1st generation learners. • At upper primary stage English and other regional languages already updated according to the guidelines by NCF-2005. The textbooks for primary stage developed by private publishers in the light of NCF-2005. • Textbooks in Social Sciences and Sciences published in Sikkim language by private publishers.

		<ul style="list-style-type: none"> Local relevant information incorporated in textbooks. At secondary stage the state follows curriculum developed by CBSE and textbooks developed by NCERT from classes IX to XII.
31.	Tamil Nadu	<ul style="list-style-type: none"> Tamil version of NCF printed and circulated. DTERT has taken up the task of reviewing and revising the syllabi and textbooks from classes I to XII. Based on NCF-2005, DTERT has developed common school board syllabus for classes I to X and textbooks for classes I to VI during 2009-10. The books for the rest of the classes are under print and will be issued to schools free of cost by the state govt. before June, 2011.
32.	Tripura	<ul style="list-style-type: none"> Revised textbooks for classes I to V and introduced in the state during 2011. Textbooks for classes VI-VII are under revision. The task will be completed soon and textbooks are likely to be introduced from the academic session 2012.
33.	Uttarakhand	<ul style="list-style-type: none"> SCERT, Uttarakhand has prepared all textbooks from classes I to V. Adopted NCERT textbooks from classes VI to XII.
34.	Uttar Pradesh	<ul style="list-style-type: none"> Revision of syllabi was completed. Revision of textbooks in progress.
35.	West Bengal	<ul style="list-style-type: none"> Core Group was set up. Subject Groups were formed. Work on curriculum and textbooks in progress.

It is clear from the above table that the nature and extent of implementation varies from state to state. Several states are using NCERT syllabus and textbooks and the other states are developing the syllabus & textbooks on the basis of NCF-2005.

STATUS OF TEN YEAR SCHOOL CURRICULUM IN DIFFERENT STATES/UNION TERRITORIES

QUESTIONNAIRE

This Questionnaire consists of two parts. Part I is related to data pertaining to weightage given to different areas of school curriculum. Part-II consists of information related to preliminary data, subject nomenclature, transactional approaches and curriculum evaluation.

1. Name of the State/UT _____

2. Organization/ Agency

Supplying the information _____

3. Name, designation and

Postal address of the _____

Contact person (with Telephone nos.)

4. Educational Profile (classes)

• Primary Stage _____

• Upper Primary Stages _____

• Secondary stage _____

Part-I

Time allocation for Different Subjects at Different Stages of School Education

I. PRIMARY STAGE

5. Number of Instructional (working) days in a year _____

6. Class-wise time allocation

S.No.	Time-allocation	Classes				
		I	II	III	IV	V
i)	Total duration of a school day (in hours)					

- ii) Total number of periods in a week
- iii) Duration of a period (in minutes)
- iv) Number of recess periods
- v) Duration of Recess Periods (in minutes)

7. Type of subjects

S.No.	Type	No. of subjects	Name of subjects
Core areas (Compulsory subjects)			
Elective subjects			
Optional subjects			

8. Please give subject wise information in the following table

- 'P' stands for total period per week
- 'T' stands for duration of time in annual examination (in hours)
- 'M' stands for total marks in annual examination

Table I: Subject wise period, time and marks of annual examination

S. No.	Subjects	Classes														
		I			II			III			IV			V		
		P	T	M	P	T	M	P	T	M	P	T	M	P	T	M
1.																
2.																
3.																
4.																
5.																
6.																
7.																
8.																
9.																
10.																

II. Upper Primary (Classes V/VI-VIII)

9. Number of working days in a year _____

10. Class-wise time allocation

S. No.	Time-allocation	Classes		
		VI	VII	VIII

i) Total number of periods in a week

ii) Duration of a period (in minutes)

iii) Number of recess periods

i) Duration of Recess Periods (in minutes)

v) Total duration of a school day (in hours)

11. Type of subject

S. No.	Type	No. of subjects	Name of subjects
i)	Compulsory Subjects		
ii)	Elective Subjects		
	iii) Optional Subjects		

12. Please give subject wise information in the following table

'P' stands for total period per week

'T' stands for duration of time in annual examination (in hours)

'M' stands for total marks in annual examination

Table II: Subject wise period, time and marks of annual examination

[illegible]

III. SECONDARY STAGE (Classes IX, X)

13. Number of working days in a year _____

14. Class-wise time allocation

S. No.	Time-allocation	IX	X
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- i) Total number of periods in a week
- ii) Duration of a period (in minutes)
- iii) Number of recess periods
- iv) Duration of Recess Periods (in minutes)
- v) Total duration of a school day (in hours)

15. Type of subject

S. No.	Type	No. of subjects	Name of subjects
Compulsory Subjects			
Elective Subjects			
Optional Subjects			

16. Please give subject -wise information in the following table

'P' stands for total period per week

'T' stands for duration of time in annual examination (in hours)

'M' stands for total marks in annual examination

Table III: Subject -wise period, time and marks of annual examination

CLASSES								
S.NO	SUBJECT	IX			X			REMARKS
		P	T	M	P	T	M	
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								

Part-II

Curricular Areas

17. Name the Agency for constructing the Curriculum for

i) Primary Stage _____

ii) Upper Primary Stage _____

iii) Secondary Stage _____

18. Mechanism for development of curriculum

- Primary _____

- Upper primary _____

- Secondary _____

19. a) Does your state follow the three language formula Yes/No

b) If yes, what are the languages prescribed for teaching at

- Primary _____

- Upper primary _____

- Secondary _____

c) If not, what is the alternative formula adopted?

d) Name the languages prescribed for examination at the end of Ten Year Schooling.

20. a) Under what nomenclature is science taught in your state? Please tick mark ()

S. No.	Subject	Primary	Upper Primary	Secondary
i)	General Science			
ii)	Integrated Science			
iii)	Physics and chemistry			
iv)	Physical and Biological Sciences			
v)	Discipline wise			
vi)	Any other (please mention)			

b)What approach is recommended for teaching of Science? Please tick mark ().

S. No.	Approach	Primary	Upper Primary	Secondary
i)	Integrated Approach			
ii)	Disciplinary Approach			
iii)	Both			
iv)	Any other			
	(Pl. mention)			

21. (a) Under what nomenclature are social sciences taught in your state? (Please tick mark).

S. No.	Subject	Primary	Upper primary	Secondary
i)	Social Sciences			
ii)	Social studies			
iii)	History, Geography and Civics			
iv)	History, Geography, Civics & Economics.			
v)	Any other (Pl. mention)			

(b) What approach is recommended for teaching of Social Sciences? (Please tick mark)

S. No.	Approach	Primary Stage	Upper Primary Stage	Secondary Stage
i)	Integrated Approach			
ii)	Disciplinary Approach			
iii)	Both			
iv)	Any other			
	(Pl. mention)			

22. a) What is the status of Art Education in your curriculum? (Please tick mark)

S. No.	Primary	Upper Primary	Secondary
--------	---------	---------------	-----------

i) Compulsory

ii) Optional

iii) Elective

iv) Any other

(Please mention)

b) What are the areas of Art Education?

- Primary Stage _____
- Upper Primary Stage _____
- Secondary Stage _____

c) Art Education is an examination subject at the end of

- Primary Stage Yes/No
- Upper Primary Stage Yes/No
- Secondary Stage Yes/No

23. a) What is the status of Health and Physical Education in your Curriculum? Please tick mark ()

S. No.	Primary	Upper Primary	Secondary
--------	---------	---------------	-----------

1. Compulsory

2. Optional

3. Elective

4. Any other (Pl. mention)

b) Is Physical and Health Education subject at the end of?

- Primary Stage Yes/No
- Upper Primary Stage Yes/No
- Secondary Stage Yes/No

c) What are the areas of Physical and Health Education?

- Primary Stage _____
- Upper Primary Stage _____
- Secondary Stage _____

24. a) What is the nomenclature of work education in your state/UT area? Please tick marks ()

S. No.	Area	Primary	Upper Primary	Secondary
i)	Socially useful Productive Work (SUPW)			
ii)	Work Experience			
iii)	Work Education			
iv)	Craft			
v)	Any other			

b) Is it a compulsory area of curriculum? Yes/No

c) If no, what is the status, please specify _____

d) Is this area an examination subject at the end of?

- Primary Stage Yes/No
- Upper Primary Stage Yes/No
- Secondary Stage Yes/No

25. a) To what extent are the textbooks nationalized? Please tick mark (). Also mention the subject.

S. No.		Primary Subject	U.P. Subjects	Secondary Subject
1.	All			
2.	Most			
3.	Some			
4.	None			

26. (a) Mechanism for evaluation of curriculum?

(Marking or Grading or any other)

- Primary stage _____
- Upper Primary Stage _____
- Secondary Stage _____

26. (b) Status of implementation of Continuous Comprehensive Evaluation.

- Primary Stage _____
- Upper Primary Stage _____
- Secondary Stage _____

27. The present status of implementation of NCF-2005

Primary

Upper Primary Stage

Secondary Stage

28. Suggestions if any for improving the school curriculum.

Primary Stage: _____

Upper Primary Stage: _____

Secondary Stage: _____
